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TED SCHWINDEN
GOVERNOR

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Message from the Governor:

Livestock and associated products comprise a major segment of Montana's largest industry -- agriculture. In 1985, agriculture provided nearly one-third of the receipts of our state's primary industries.

Rangeland and grazeable woodland cover nearly 70 percent of Montana's surface area. Given our rangeland's economic importance and its social and cultural significance, it is clearly one of Montana's major renewable resources.

The State of Montana has taken numerous actions to protect this natural resource and to serve the livestock industry that depends on it. Most significant among these is the statewide Rangeland Resource Program, which works through local committees to improve our rangelands. An individual in each county, usually a rancher, is appointed as range leader. With the county range committee, leaders establish various programs to promote the proper use of rangelands. Because it is carried out almost entirely by volunteers at the local level, the Montana Rangeland Resource Program is unique.

In Montana, local control of range management has proven to be the most workable strategy. This office and the Department of Natural Resources and Conservation will continue to support this program in every way possible. However, it is local people, our agricultural producers, who will make the Rangeland Resource Program work -- for themselves and for Montana.

Sincerely,

Ted Schwinden

TED SCHWINDEN
Governor

MONTANA RANGELAND RESOURCE PROGRAM

MONTANA DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION

1520 EAST SIXTH AVENUE
HELENA, MONTANA 59620-2301
(406) 444-6667

DECEMBER 1986

FOREWORD

Rangeland is Montana's largest resource--over 65 million acres are classified as rangeland and grazeable woodland. Too often the importance of this vast resource is underestimated, and in many ways, almost taken for granted. These lands rarely receive the attention or the credit they deserve as a vital part of our state's economic complex. Likewise, the stewardship of the owners and managers of our rangelands also has gone largely unrecognized.

In 1984, the products from the state's rangelands were the single greatest economic resource in Montana. Besides sustaining the bulk of our livestock industry, our rangelands provide clean water, recreation, scenery, and habitat for wildlife. Montana's rangelands sustain the livelihood of over 20,000 farm and ranch families.

The major use of rangeland will surely continue to be forage for livestock because it is an important part of our meat supply. But new opportunities could occur to use this resource in other, less traditional ways. These uses need not compete with the livestock industry. In fact, they should complement ranching, increasing the value of the resource and helping improve our economic stability statewide.

For the good of the livestock industry, the public, and for the land itself, we must strive to see that neglected lands are continually improved and protected. The Montana Rangeland Resource Program is a state-level effort assigned to the Department of Natural Resources and Conservation to attain these goals. The department is fully aware of the beneficial effects such a program may provide and pledges maximum support for the program.

The department would like to thank the many agency personnel who provided valuable data for this report. We hope the information given here will help those who are the stewards of our rangelands to understand and achieve the goals of the Rangeland Resource Program.

Larry Fasbender, Director of the Department of Natural Resources, and Ray Beck, Administrator of the Conservation Districts Division, directed the production of this report. It was compiled by Jack Thomas and edited by Peggy Todd. Don Howard did the layout and designed the cover. Laurie Zeller and Lisa Thornburg did the word processing. Margie Peterson did the typesetting. The cover photo by Jim Bond shows an early-day saddle built by Ben Roberts, courtesy of DeVore's Saddlery, Helena, Montana.

TABLE OF CONTENTS

FOREWORD ____ v
LIST OF TABLES ____ ix
LIST OF MAPS ____ xi

PART ONE. THE RESOURCE

OVERVIEW ____ 1
- Selected Natural Features ____ 1
- Land Ownership and Use ____ 1
- Ownership ____ 1
- Use ____ 5

AGRICULTURE IN MONTANA ____ 6
RANGELAND ____ 7
- Uses and Demands ____ 7
- Livestock ____ 7
- Wildlife Habitat ____ 8
- Water Production and Control ____ 9
- Soil Erosion Control ____ 9
- Recreation ____ 10
- Urban and Industrial Expansion ____ 10
- Transportation ____ 11
- Education and Science ____ 11

RANGE CONDITION ____ 12
- History ____ 12
- Current Status ____ 12
- Effect of Range Improvement ____ 12

PART TWO. THE PROGRAM

BACKGROUND ____ 21
ADMINISTRATION ____ 22
- State Level ____ 22
  - Conservation Districts Division ____ 22
  - Program Coordinator ____ 22
  - Advisory Body ____ 23
- Local Level ____ 24
  - Conservation Districts ____ 24
  - Range Leaders ____ 24
  - County Range Committee ____ 25
- Individual Level ____ 25

PROGRAM IMPLEMENTATION ____ 26
Support Data ____ 26
Rangeland Inventory ____ 26
Program Assessment ____ 26
Other Planning Needs ____ 26
Program Goals ____ 26
Original Goals ____ 26
Achievements ____ 27
New Goals ____ 28
RANGELAND IMPROVEMENT LOAN PROGRAM ____ 30
PROJECTS AND PLANS ____ 32

CONCLUSION ____ 34

APPENDICES ____ 35
Appendix A. Laws Related to Rangeland ____ 35
Appendix B. Montana Rangeland Resource Act 76-14-101, MCA ____ 36
Appendix C. Persons and Groups with Rangeland Management Responsibilities ____ 39
Appendix D. Montana Range Leaders ____ 47
Appendix E. Checklist for Range Leaders ____ 49
Appendix F. Suggested Language for Inclusion in Leases and Contracts ____ 51

REFERENCE MATERIALS ____ 52
SELECTED BIBLIOGRAPHY ____ 53

TABLES

1. OWNERSHIP OF ACREAGE OF FEDERAL LANDS IN MONTANA ____ 2
2. USE OF ACREAGE OF PRIVATE LANDS - 1985 ____ 5
3. USE OF ACREAGE OF NONFEDERAL LANDS - 1984 ____ 5
4. MONTANA AGRICULTURE ____ 6
5. DAYS OF HUNTING FOR SELECTED SPECIES AND YEARS ____ 10
6. NET RETURNS FROM A 5,000-ACRE RANCH UNDER DIFFERENT MANAGEMENT PRACTICES ____ 13
7. NET RETURNS FROM A 5,000-ACRE RANCH UNDER DIFFERENT RANGE CONDITIONS ____ 14
8. ESTIMATED CONDITION OF NONFEDERAL RANGELAND ____ 27
9. RANGELAND CONDITION BY OWNERSHIP ____ 27
10. RANGELAND LOAN IMPROVEMENTS ____ 31

MAPS

AVERAGE ANNUAL PRECIPITATION ____ 2

RANGELAND CONDITION BY MAJOR LAND RESOURCE AREAS ____ 3

LAND USE ____ 4

RANGELAND RESOURCE AND RANGE CONDITION ____ 15

PART ONE

THE RESOURCE

PART ONE

THE RESOURCE

OVERVIEW

When the early explorers first reached Montana, many wrote that it was near paradise. Native wildlife abounded, the grasses were tall and lush, and the waters were sparkling clean.

As the country was settled, great herds of cattle were brought from the south and east to graze the vast ranges. The period from 1850 to 1880 saw cattle numbers grow several hundred percent. Accompanying that increase came a corresponding decrease in wildlife numbers and variety.

The long, bitterly cold winter of 1886-1887 took a great toll on the herds. The badly abused ranges had been so severely overgrazed that they could not provide forage for all the stock and the cattlemen could not feed their immense herds. (Some 70 to 80 percent of the cattle perished.)

The cattlemen had learned a costly lesson--that proper care for the ranges was essential. It has taken a hundred years to improve those denuded ranges and the job is far from finished. The condition of our rangelands has now reached only about 60 to 70 percent of their potential.

SELECTED NATURAL FEATURES

Montana is a large state affected by a wide variety of natural conditions. Elevations, for example, range from 1,800 feet above sea level in the extreme northwest corner where the Kootenai River flows into Idaho, to the 12,000-foot heights of Granite Peak near Yellowstone National Park.

The portion of the state west of the Continental Divide is favored with a semi-Pacific or semi-maritime climate, while the areas east of the divide have a continental climate. The mean annual temperature is 42^{0}F. Grazing seasons in the state vary from an average of 39 days in some mountainous areas to 150 days in the plains.

Montana's precipitation ranges from just over six inches in the south-central part of the state to nearly 120 inches in the northwest. Most of Montana receives between 10 and 19 inches of precipitation and is semi-arid.

Over forty-three million acre-feet of water flows from Montana during an average year. However, the water resource is not uniformly distributed geographically, and much of the flow comes during the spring runoff period.

In summary, Montana has widely varying climactic conditions--hot and cold, dry and wet, windy and calm. The soils, vegetative cover, erosion, and sediment production on the rangelands throughout the state are directly affected by these extremes.

LAND OWNERSHIP AND USE

Montana covers almost 94 million surface acres. Just under one million acres are covered by surface waters. The state's land area covers 147,139 square miles.

OWNERSHIP

There is a general intermingling of public and private land in the state. Over 61 million acres are covered by private farms and ranches, ranking Montana second in the nation only to Texas in private land ownership. Many ranches, however, are heavily dependent upon the nearly 33 million acres of public land to balance their grazing plans. Consequently, a coordinated effort by various landowners is often necessary to maintain and improve range management practices.

The graph provides a breakdown of the ownership of lands in Montana.

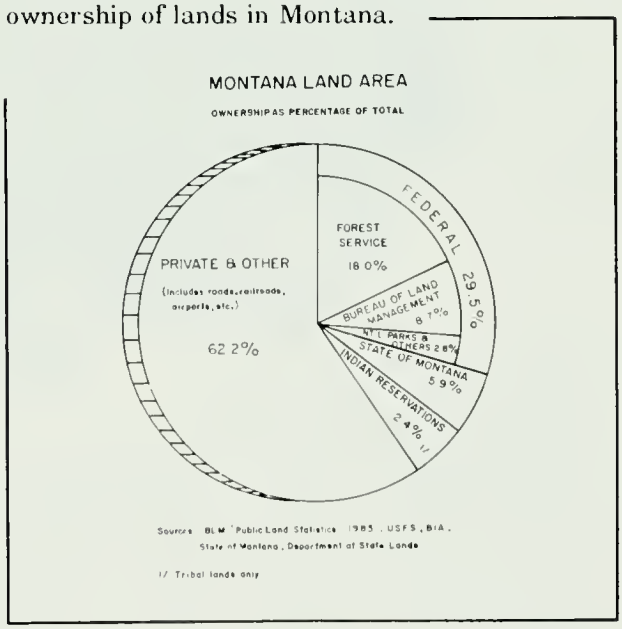

MONTANA LAND AREA
OWNERSHIP AS PERCENTAGE OF TOTAL
FEDERAL 29.5%
FOREST SERVICE 18.0%
BUREAU OF LAND MANAGEMENT 8.7%
PARKS & OTHERS 2.8%
STATE OF MONTANA 5.9%
INDIAN RESERVATIONS 2.4% 1/
PRIVATE & OTHER
(includes roads, railroads, airports, etc.)
62.2%
Source: BLM "Public Land Statistics 1985", USFS, BIA, State of Montana, Department of State Lands
1/ Tribal lands only

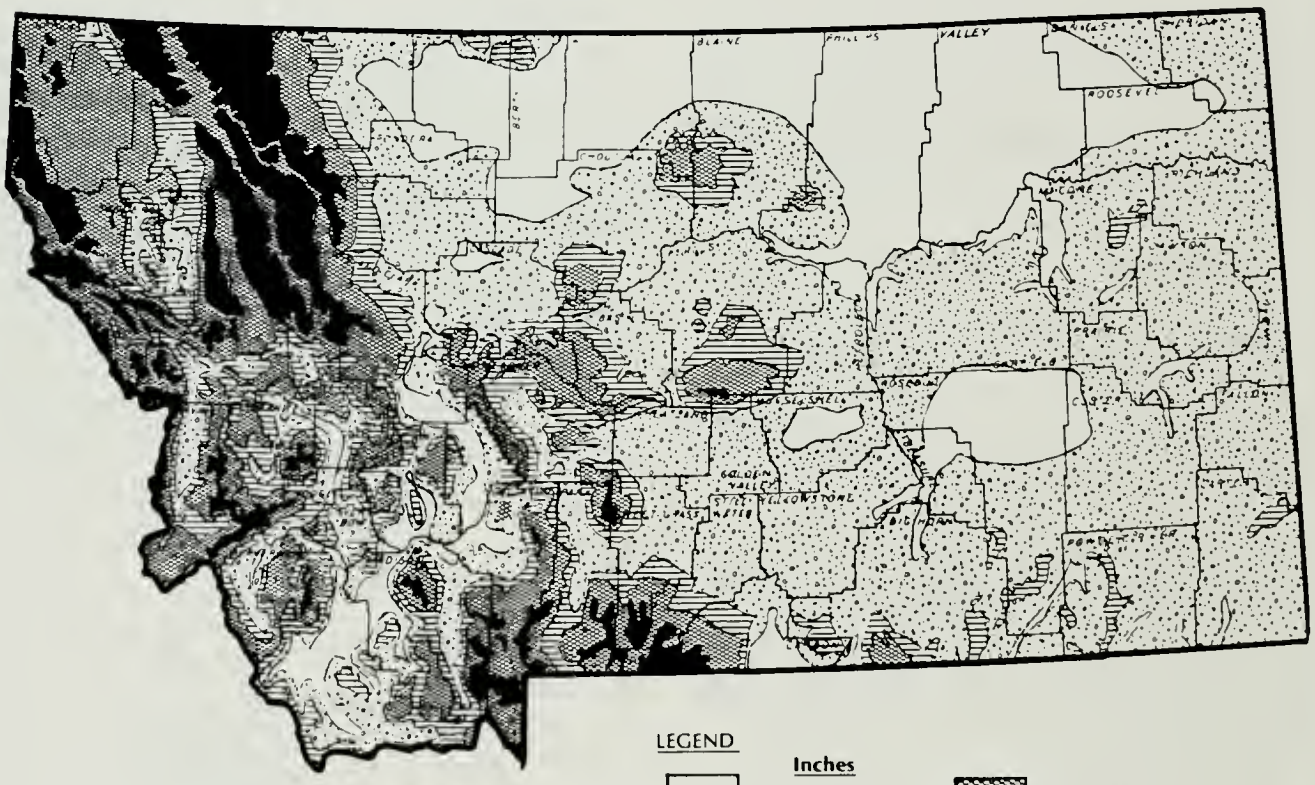
TABLE 1

Ownership of Acreage of Federal Lands in Montana

U.S. Forest Service	16,733,232
Bureau of Land Management	8,011,595
Bureau of Reclamation	256,270
National Park Service	1,185,435
U.S. Fish and Wildlife Service	1,077,709
U.S. Army Corps of Engineers	47,164
Total Federal Land	27,311,405

Source: Montana Department of Agriculture, U.S. Department of Agriculture, Statistical Reporting Service, 1985

AVERAGE ANNUAL PRECIPITATION



LEGEND

Inches

0 - 12

12 - 16

16 - 20

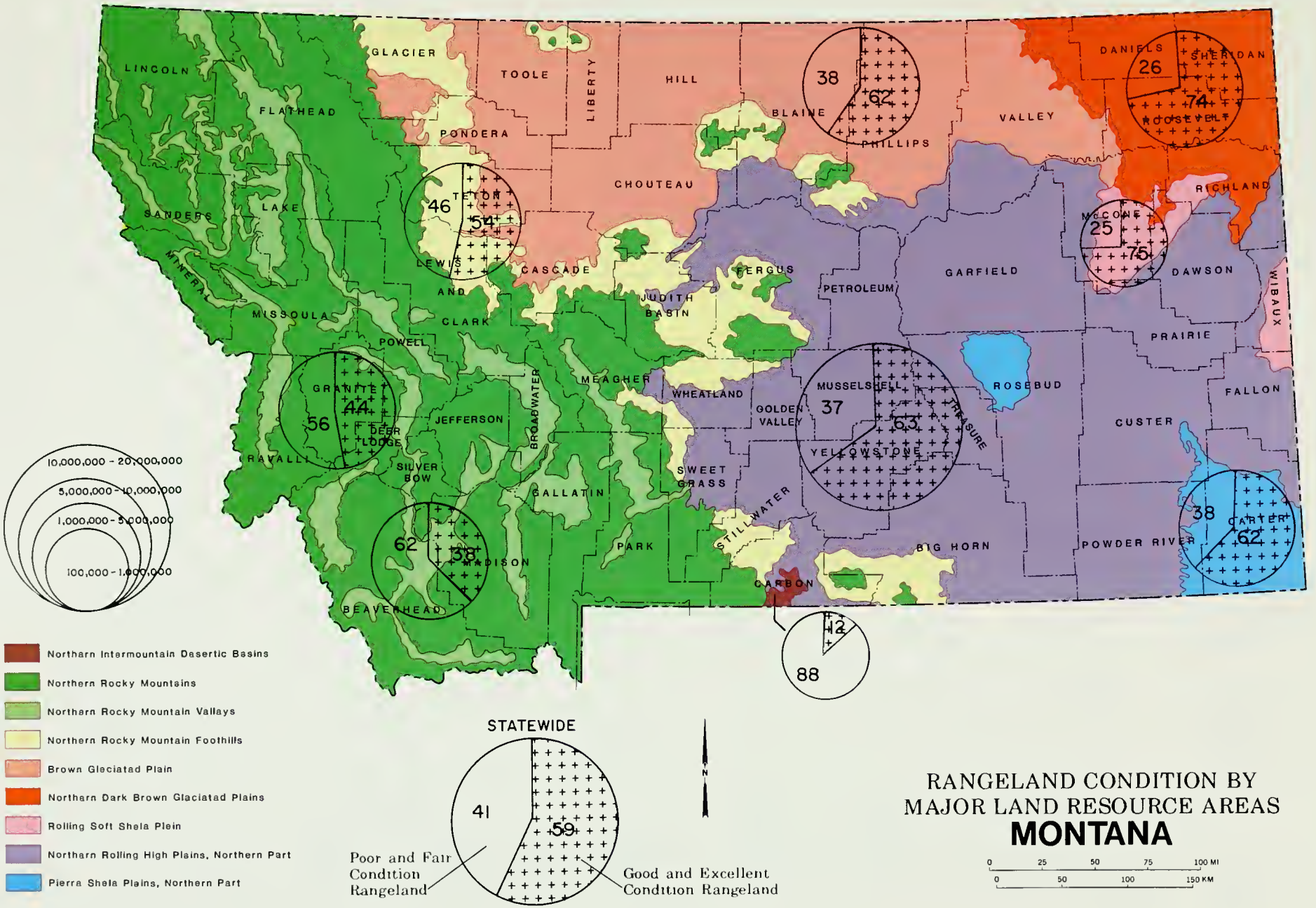
20 - 40

40 & more

Based on period 1953-67

Mt. Crop & Livestock Reporting Service
Helena, Montana

Source
U S D A Soil Conservation Service
Montana Water Resources Board
National Weather Service

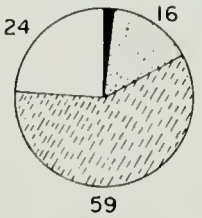


RANGELAND CONDITION BY MAJOR LAND RESOURCE AREAS

MONTANA

USDA SCS FORT WORTH TEXAS 1985

STATE



A - Cropland

B - Rangeland

C - Woodland

D - Other

The numbers with the charts represent percentage. Some representations within the charts are too small for easy identification; therefore, a letter/number combination has been used for those areas. For those areas representing less than one percent, only the letter designation is used.

LAND USE

MONTANA

AUGUST 1976

10 0 10 20 30 miles

4

USE

Land use in Montana is shown on the Land Use map on page 4. The use of private lands is reported in table 2.

TABLE 2

Use of Acreage of Private Lands - 1985

Irrigated Cropland	1,488,295
Dry Cropland	12,196,984
Subtotal	12,685,279
Grazing Land	43,112,215
Wild Hay Land	1,081,560
Timber Land	3,177,035
Subtotal	47,370,810
Total - Private Land	61,056,089

Source: Montana Department of Revenue 1986

Table 3 illustrates the uses of all nonfederal lands in the state including private, Indian (trust and allotted) and state-owned lands.

TABLE 3

Use of Acreage of Nonfederal Lands - 1984

Irrigated Cropland and Hayland	2,082,600
Non-irrigated Cropland and Hayland	15,114,300
Subtotal	17,196,900
Range, Pasture, and Woodland	46,101,000
Small Water Areas	300,900
Other--Minor Rural and Urban Uses	2,348,300
Subtotal	48,750,200
Total Nonfederal Land	65,947,100

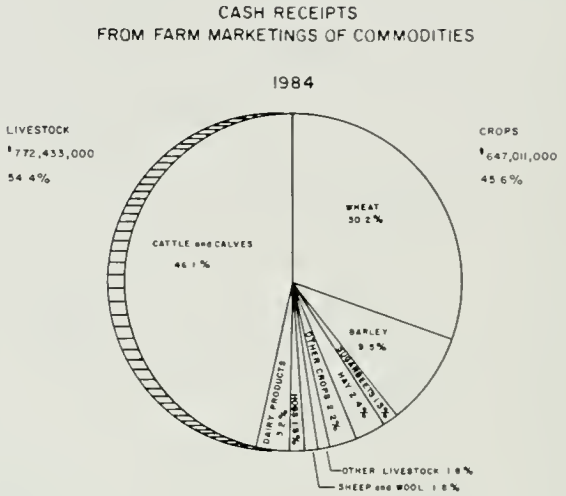
Source: Soil Conservation Service 1984

Source: Montana Department of Agriculture and U.S. Department of Agriculture, Statistical Reporting Service 1985

AGRICULTURE IN MONTANA

Livestock and livestock products have historically brought a substantial annual income. In 1984, they brought over one-half the income of the agricultural industry, which is the major industry in Montana. The graph illustrates the cash receipts from farm marketing of commodities during 1984.

Montana has approximately 24,000 farms with an average size of 2,585 acres. Additional statistics concerning Montana agriculture are presented in table 4.



Source: Montana Department of Agriculture and U.S. Department of Agriculture, Statistical Reporting Service, 1985

TABLE 4

Montana Agriculture

Agricultural Feature	Rank in the Nation
Area in farms and ranches (including leased land) - 61,100,000 (1984)	2
Income from livestock - 772,433,000 (1984)	30
All cattle and calves - 2,960,000 (1985)	12
Beef cows - 1,513,000 (1985)	6
All sheep and lambs - 515,000 (1985)	8

Source: Montana Department of Agriculture and U.S. Department of Agriculture, Statistical Reporting Service 1985

RANGELAND

Grass is Montana's biggest crop. About 70 percent of the state is rangeland, pasture, and grazeable woodlands. Over 65 percent of these grasslands are privately owned. The balance are public lands, the majority of which are administered by the U.S. Forest Service, the Bureau of Land Management, and the Department of State Lands.

USES AND DEMANDS

Montana's population has risen slowly, increasing 3 percent from 1970 to 1980, and 5 percent from 1980 to 1984. Although population density, measured in people per square mile, was only 5.4 in 1980--third lowest in the United States--increasing demands are made on every acre of land. This has emphasized the need for broad-based resource planning, particularly for individual land managers.

To more fully describe the situation, this section lists and briefly describes the demands placed upon and the uses of our rangelands today.

LIVESTOCK

The largest single demand on Montana's rangelands today is production of forage for livestock. Nearly 90 percent of the livestock grazing is on privately-owned lands.

Costs of operation have risen dramatically over the last decade. High interest rates and inflation have severely affected the livestock industry. Calf prices have declined almost 33 percent since their peak in 1979. While the demand for livestock products remains relatively high, today's producer has been forced to become a much more efficient operator and a skillful businessman.

During the mid-1970s, much of the state received above-normal precipi- tation, which led to some increase in animal numbers and stocking rates. The past several years, however, have been drier than normal while total livestock numbers have remained virtually static. The rangelands have generally withstood these pressures well and, on the average, the condition of the vegetation has improved slightly. Well managed range in good condition is better able to withstand overuse during drought than range in poor condition.

Noxious weeds have become a serious problem in some areas within the last decade. Spotted knapweed has become a major threat to the productivity of approximately two million acres of rangeland in the state. This weed can reduce forage production by as much as 90 percent. Several other noxious weeds, such as leafy spurge, Canadian thistle, diffuse knapweed, and others are also a problem. A statewide weed control program under the administration of the Montana Department of Agriculture and accelerated research programs have been implemented to combat our noxious weed problems.

Another threat to our rangelands became most prevalent in the late 1970s and early 1980s. It is estimated that well over two million acres of rangelands were plowed up and converted to cropland during this period. Tax sheltering and speculation were the principal motives for this conversion. Federal tax exemptions were a major economic incentive for investors who did not plan to retain ownership of the lands. The increased

value of the converted cropland made it eligible for capital gains designation. In addition, federal farm program benefits increased the revenue from the land during the period of ownership and also promised higher selling prices for cropland if the land was expected to qualify for future farm programs. However, recent farm program legislation--often referred to as the sodbuster provisions--coupled with reduced tax incentives, reduced land values, and less than normal rainfall have all but halted this conversion. Many of the acres that were once converted and produced virtually no crop are now being planted back to grass, the crop that is best suited for these sites.

The livestock industry is very much dependent upon Montana's rangelands. These lands must be properly managed and constantly improved to ensure a stable and economically sound base for the future of the industry.

WILDLIFE HABITAT

Montana has long been famous for its wildlife. Early history reports the plains and mountains abounding with elk, antelope, buffalo, and deer; the streams had large numbers of waterfowl, beaver, and fish.

The number and species have fluctuated greatly since the settling of Montana. Although the pioneers, homesteaders, and miners for many years lived off game or supplemented their diet with wild meat, the greatest impact on wildlife was not hunting, but the alteration, or, in some cases, the destruction of wildlife habitat.

During the first part of this century, wildlife numbers decreased dramatically. This situation alarmed many people and laws were enacted to protect the declining populations. Since that time,

the actions of concerned landowners and the establishment of protected areas, parks, and hunting laws have aided to increase wildlife numbers and improved habitat.

Rangelands, when they are in top condition, support a wide variety of wildlife. Sixty-five percent of the feed for wildlife is produced on privately owned rangeland. As our population increases, there appears to be greater interest in and desire for more wildlife. If this demand is to be met, rangeland condition must be improved rapidly. Our expanded knowledge of ecology has shown that only a healthy and balanced environment will be capable of supporting wildlife in the numbers desired while the other demands on rangelands are also met.

WATER PRODUCTION AND CONTROL

Montana is a major upstream producer of fresh water. The vast acreage of rangeland is tremendously important for water production, but this function has in the past been given too little attention as a benefit of the rangelands.

A predictable flow of water received from rangelands depends upon a protective cover of vegetation. This requirement does not restrict the harvest to grass, but it does mean that good grass condition must be maintained at all times. Under these conditions runoff is controlled, subsoil water storage is increased, and streamflow is maintained on a year-round basis. Thus, a more dependable supply of water is assured.

Today, increased numbers of people are demanding water in unprecedented quantities. These demands will continue to expand, and rangelands will be expected to produce the maximum amount of good, clean water. Good vegetation management planning will help assure reaching this goal.

SOIL EROSION CONTROL

The problems arising from soil erosion were ignored in the process of settling our nation. However, erosion is recognized today as a danger to the health and prosperity of our country.

Agriculture is a major contributor to both wind and water erosion, but this need not be true for rangeland. A good vegetative cover will minimize erosion by both wind and water, even in times of drought, flood, or natural spring runoff. Range in poor condition, however, will suffer from wind and water erosion processes.

The passage of the Federal Water Pollution Control Act (P.L. 92-500) was the beginning of a federal program to protect the quality of water. Studies were made in designated counties under Section 208 of this law to determine soil losses from erosion and nonpoint sources of pollution. The Montana Streambed and Land Preservation Act (SB 310) is also being enforced by local conservation districts to prevent damage to banks or beds of perennial streams. (A list of laws relevant to rangeland is included as Appendix A.)

Properly managed range will help minimize violations of these protective statutes, maximize productivity, and ensure environmental quality. All those involved in rangeland management should, in their long-range plans and guidelines, stress the need for measures to prevent water and wind erosion of rangelands.

RECREATION

The need for recreation has grown with a rapidly expanding national population. Also, people have more time to enjoy themselves today than ever before. This creates a demand on rangeland, in addition to the production of agricultural products, for the rangelands are being increasingly looked to as areas where recreational activities can be enjoyed.

The range and grasslands offer a wide variety of recreational uses as diverse as the imagination of the people that use them. The primary uses are hunting, fishing, and camping. The number of paid hunting licenses increased 53 percent from 1970 to 1984. In 1984, almost 2.7 million days of hunting were enjoyed by sportsmen in the state, and much of this took place on rangeland (Montana Department of Fish, Wildlife and Parks, 1986). People have increasingly shown greater interest in pursuing other forms of pleasure on grasslands, such as photography, artifact and gem hunting, cross-country skiing, snowmobiling, hiking, and backpacking.

Montana's rangelands, managed and cared for in a prudent manner with due respect for their fragile condition, can meet the increased demands that recreation will place upon them.

URBAN AND INDUSTRIAL EXPANSION

The increasing demands for suburban housing, highway and powerline corridors, and industrial sites are rapidly taking many acres of rangelands out of production. In some areas, prime crop and grazing lands are being used for these purposes.

This type of use is difficult to control. The impacts of these demands are serious, not only because of lost production on some of the prime lands, but also because the expansion often occurs in the most fragile areas. The attending construction--access roads, water supply, and sewage facilities-- have a decidedly important effect on both the environment and on ranch operations. Intensive management practices, zoning laws, and subdivision regulations are logical and necessary steps to take to deal with this situation.

TABLE 5

Days of Hunting for Selected Species and Years [1]

Species	1970	1980	1984	1990 [2]
Deer	616,050	810,680	1,131,028	1,153,700
Elk	536,820	566,659	569,444	801,400
Antelope	74,406 [3]	32,208	111,021	105,300
Upland Birds	[4]	354,413	266,694	391,200
Turkey (fall)	2,347	8,646	11,055	---
Waterfowl (ducks)	96,812	157,655	499,333	318,400 [5]
Archery [6]	14,568	118,445	102,870	228,000

1 These figures can't be added because many hunters hunt several species at the same time.
2 Projections from "Design for Tomorrow 1985-1990" MDFWP.
3 1971 figures.
4 Data not comparable to 1980 and 1984.
5 Based on persons licensed to hunt waterfowl.
6 Average of hunter days for deer, antelope, and elk.

Source: Montana Department of Fish, Wildlife and Parks 1986

TRANSPORTATION

The development of the rural agricultural region of Montana is very much dependent upon the network of federal, state, and county highways and roads. Out of engineering and economic necessity, many of these roads were built along waterways and often took prime agricultural lands out of production. By 1984, some 784,300 acres were being used for transportation corridors.

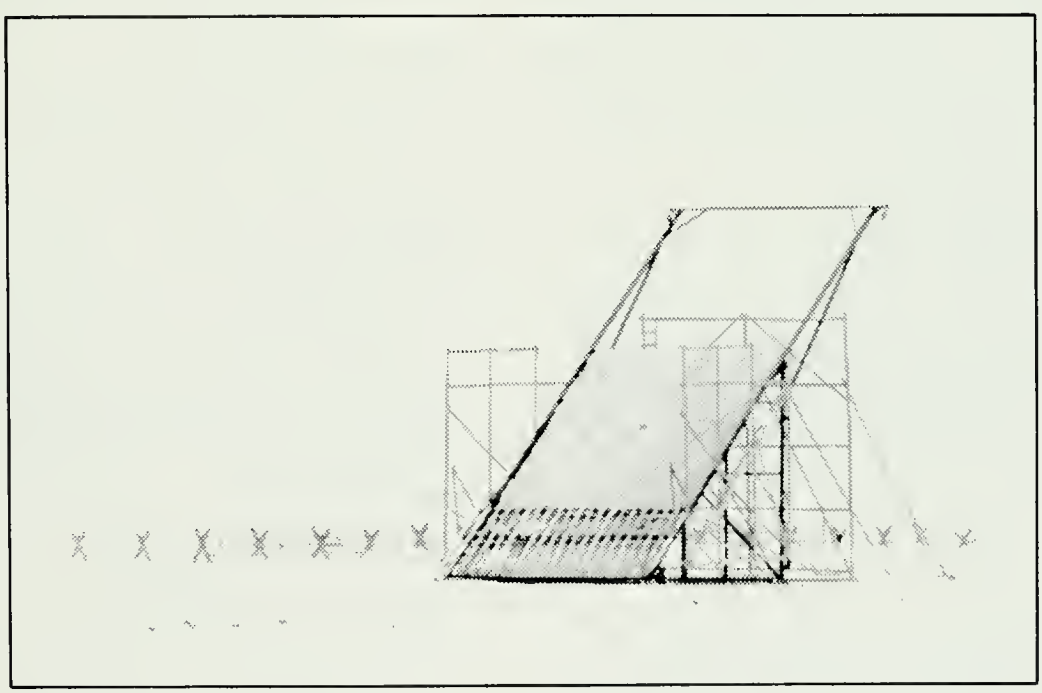
More significantly, these transportation networks are a major source of noxious weed infestations. The spread of many noxious weeds, which are seriously affecting vast acres of rangelands, is often directly attributable to vehicular traffic. Major efforts are now underway to control this problem.

EDUCATION AND SCIENCE

The education of people concerned with range resources is necessary to guarantee proper management and use. Part of this existing education process is having examples of good range vegetation available for study.

Many ranchers throughout the state have excellent examples of good range practices applied on their privately owned lands. These examples are often used on range tours to demonstrate to ranchers, businessmen, and others the benefits of good range management.

The science of range management requires a great deal of information to be used by range scientists in research, education, and the application of their work to the resource. The importance attached to range improvement is evidenced by increased enrollment in range management studies in the universities. Extensive research is being carried on by research institutions, agricultural experiment stations, and the universities. Technical agencies are working closely together to disseminate new methods and techniques of range management practices. Lending agencies are showing increased interest in range problems by sponsoring range schools and adding agricultural representatives to their staffs. Management planning, range condition, production figures, and market weights are replacing stock numbers as major factors in rangeland resource management. Scientific range management is becoming recognized as a factor necessary for a stable industry.



RANGE CONDITION

HISTORY

Before the turn of this century and until the end of the homestead period, much of the state's rangeland was overgrazed or mismanaged--first by herds of southern cattle, followed by bands of sheep, and, finally the homesteader. During the later period, much as a result of the Homestead Act, and because few people understood the Great Plains climate, many thousands of acres of rangeland and pasture land were farmed with dismal results. Some lands were left to recover naturally as best they could, while many more of the more fragile areas were finally reseeded with introduced species of grasses. Scars from this era are still evident on some ranges.

Many thousands of acres of rangeland in the nation and in Montana have been badly eroded by wind and water, with the resulting loss of untold dollars worth of the topsoil that sustains the grasses and shrubs. The value of these lands as important watersheds, for wildlife habitat, and for livestock grazing was severely reduced.

Realizing that the damaged ranges were not producing near their potential, ranchers and land management agencies have, for the past 50 years, been improving the rangelands through the use of management practices such as stockwater development, cross-fencing, brush and weed management, and new grazing systems and methods. These improvement efforts paid off as range condition throughout the state steadily improved over the period.

CURRENT STATUS

In recent years, range management has generally improved. Today, Montana's rangelands are producing at about 60 percent of their known potential. Range condition in each county in 1976, the last year that data was available on a county basis, is shown on the "Rangeland Resource and Range Condition" map on page 15. Range condition in 1982 by major land resource area is shown on page 3.

Comparison of the maps shows that the aggregate condition of rangeland statewide has remained virtually static since 1976. Although the figures for some counties have undoubtedly changed since that time, range condition within the resource areas has not improved. This fact certainly demonstrates the need for renewed attention toward implementation of necessary range conservation practices.

EFFECT OF RANGE IMPROVEMENT

Improvement in management practices and in the condition of the resource will have numerous beneficial effects. Range improvements will enhance the environment by minimizing soil loss from wind and water erosion, by reducing air and water pollution from grazing lands, by stabilizing and improving the vegetative cover on which livestock and wildlife depend, and by producing a sediment-free source of water from rangelands for rural, urban, industrial, agricultural, and recreational use.

Furthermore, as range improvements are accomplished, a positive effect can be felt in many areas of Montana's economy. The following list includes several categories where increased income can be expected and several areas where savings to the rancher and the state can be realized.

1. **Increased livestock income**
   a. Higher lamb and calf crop percentages
   b. Heavier weaning weights
2. **Reduced erosion costs**
   a. Water washing or flooding damage minimized
   b. Wind erosion damage minimized
   c. Erosion and sedimentation loss minimized
3. **Increased tax income at county, state, and federal levels**
4. **Reduced pollution control costs**
5. **Increased property values**
   a. Ranch land
   b. Businesses

Research conducted at experiment stations throughout the western range country has consistently shown the value of proper stocking and high condition ranges. Good range management means high calf and lamb percentages, heavy weaning weights, and higher net returns to ranchers, as listed above.

Costs and returns of different levels of range management carried out by ranchers throughout Montana indicate that good range management has a beneficial economic impact. Daily gains of livestock depend upon the amount of forage available. Native rangelands in good to excellent condition will provide less costly gains than those ranges in lower condition. By increasing the amount of forage available, the grazing period can be extended and the winter feeding period reduced.

Usually, calf and lamb crop percentages and market weights are increased as range condition is improved. The more pounds of beef or lamb produced per animal with the least expense, the greater the annual net return to the rancher.

The following example illustrates the favorable economic impact of good range management on a 5,000-acre unit. The exact figures are not important, but the economic benefits of improved management practices are.

TABLE 6

Net Returns from a 5,000-Acre Ranch Under Different Management Practices

Fair Condition Range 10-14 Inches Precipitation

	Proper Use	Overgrazed
Animal Units	133	286
Calf Crop	92%	80%
Weaning Weights (pounds)	425	350
Winter Feed Period (months)	4.5	5
Gross Income	$31,110	$49,464
Annual Costs	$33,250	$74,360
Net Return	-$2,140	-$24,896

The difference in net return between land that is being properly used and that which is being overgrazed is $22,756 in this example, or $4.55 per acre.

The decrease in cattle numbers (from 286 to 133) on the overgrazed range would help, along with other measures, to improve range condition. There are approximately 27,000,000 acres of poor and fair condition range in Montana that could potentially be improved to good or excellent condition.

The economic effects of improving range condition are just as favorable as those of improving management practices, as shown on table 7.

TABLE 7

Net Returns from a 5,000-Acre Ranch
Under Different Range Conditions

Proper Use 10-14 Inches Precipitation

	Fair Condition	Good Condition
Animal Units	133	190
Calf Crop	92%	94%
Weaning Weights (pounds)	425	450
Winter Feed Period (months)	4.5	4
Gross Income	$31,110	$48,222
Annual Costs	$33,250	$45,600
Net Return	-$2,140	$2,622

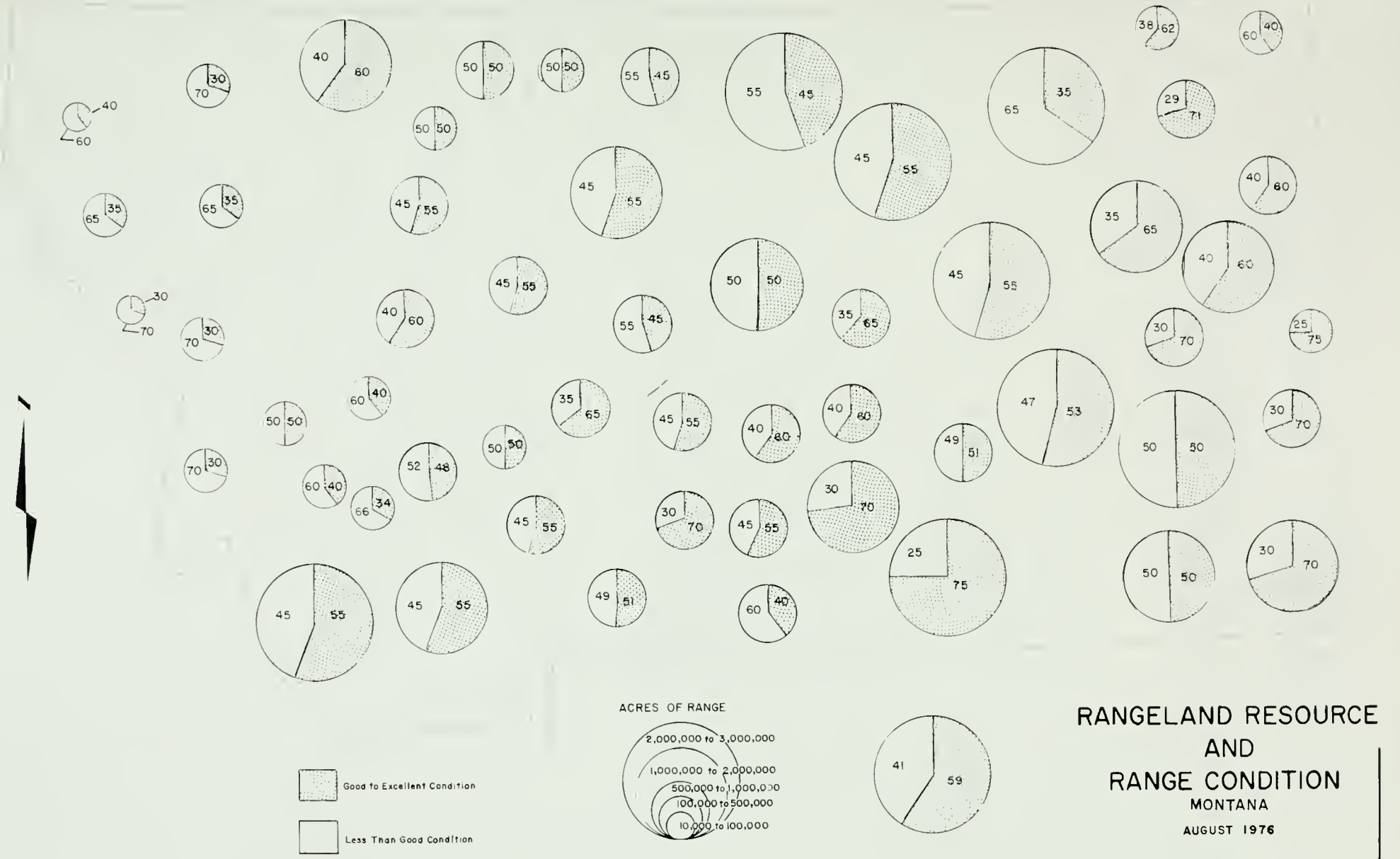
The difference in net return between the good condition range and the fair condition range is $4,762 in this example, or nearly one dollar per acre.

Note that in the preceding example, livestock numbers were decreased from 286 to 133 animals under proper management practices, and then increased to 190 animals under improved range conditions. The net stocking rate of the 5,000-acre ranch was reduced by one-third, with a substantial increase in net income.

Improved range condition would bring additional economic benefits also. An increased tax base would be established. Revenues to the state from income tax would be increased. Property values that have decreased drastically in the past few years would be expected to increase and stabilize. And finally, agricultural communities would benefit from the increased ranch income being spent for goods and services in local areas and throughout the state.

Additional financial benefits could come from increased recreation. The total annual income from tourists and out-of-state recreationists amounted to $423 million in 1983, and many of these people sought their recreational activities on rangeland (Montana Department of Commerce, 1986). Ranchers' income from recreation activities can be enhanced with improved range conditions and a change in ranch management. In recent years, many ranchers have capitalized on this opportunity to supplement their income through paid guide services, fee hunting, pack trips, family ranch vacations, fishing and camping privileges, etc. These enterprises, plus supporting businesses such as motels, restaurants, and sporting goods stores, add materially to the annual income of the state.

Further benefits of range improvement would result in reduced water pollution and erosion from rangelands, lower water supply maintenance costs, less flood damage, and a high quality, stabilized water supply that would make water development for both urban and rural areas less expensive and more dependable.



RANGELAND RESOURCE AND RANGE CONDITION

MONTANA

AUGUST 1976

10 0 10 20 30 miles

PART TWO

THE PROGRAM

PART TWO

THE PROGRAM

BACKGROUND

Realizing the serious degradation that had occurred in past years on our rangelands and the vast potential for revenues that could become available to the Montana rancher and farmer through improved management and renewed planning, the Hill County Conservation District felt it necessary and vital to seek a means of improving Hill County's rangelands. After considering the sources of assistance available and noting that the problem was not unique to Hill County, the district decided it would be helpful to all farmers and ranchers, as well as the State of Montana, to initiate a statewide rangeland program.

With this thought in mind, the district on April 16, 1969, made a formal request to the Montana State Soil Conservation Committee, an agency of state government, to study the range resource potential and to coordinate a comprehensive development program with other agencies and organizations. This study was to include all rangelands in Montana.

On June 2, 1969, at its regular meeting, the State Committee formally acted on the request. At that time, it was decided to select a steering committee and utilize all available means to draft a rangeland improvement program to be submitted to the governor for his approval. The State Soil Conservation Committee already was, by legislative mandate, to offer assistance to coordinate programs and disseminate information throughout the state concerning the activities and programs of Montana's conservation districts. Further, it was empowered to request assistance from any state or federal agency to carry out any of its assigned functions.

In 1971, under the Executive Reorganization Act, the Montana State Soil Conservation Committee was renamed the Montana Conservation Commission, and its functions were transferred to the Conservation Districts Division of the Department of Natural Resources and Conservation. The Montana 42nd Legislative Assembly approved the rangeland program by Joint Resolution No. 41 on February 27 of that year and provided for implementation by the Conservation Districts Division.

When the legislature convened for the 45th session in 1977, the Montana Rangeland Resource Program had been in successful operation for about six years. A bill called the "Montana Rangeland Resources Act" was introduced, passed, and signed by the governor, making the Montana Rangeland Resource Program a statutory part of Montana state government and thus establishing the first rangeland resource law in the United States.

The act was amended by the 1983 Legislature, at the request of the department, to revise the structure of the rangeland resource committee and to establish a special revenue account for the rangeland improvement loan program, which is a complementary program initiated in 1979 to provide low-interest loans for rangeland improvement. A copy of the current law is included in the appendix.

ADMINISTRATION

The program is intended to be implemented at the grass roots level by the conservation districts. District programs are developed by the county range leaders with the help of the district supervisors and the county range committee. The programs and actions of the various districts and range committees are coordinated by the Rangeland Resource Program coordinator, Conservation Districts Division, Department of Natural Resources and Conservation.

STATE LEVEL

Conservation Districts Division

Coordination of the Montana Rangeland Resource Program is the responsibility of the Conservation Districts Division of the Montana Department of Natural Resources and Conservation. The Conservation Districts Division's responsibilities are to both the state cooperative grazing districts and the conservation districts. The division's basic goal is to promote good natural resource management at the grass roots level; therefore, the rangeland program is one of its highest priorities.

The advice, counsel, and assistance of all interested state and federal agencies, as well as various organizations and individuals, are coordinated to implement the program. A discussion of interested agencies and organizations appears in the appendix.

Coordinating all the information needed to accomplish the objectives outlined for the range program is an important part of the overall responsibilities of the Conservation Districts Division. The dissemination of this information to all other interested groups and individuals and to the range leader in each conservation district in the state (who will actively implement the program) is a considerable task. Close liaison between the department and the districts is needed to present the program so that proper recognition is given to the many interdependent facets.

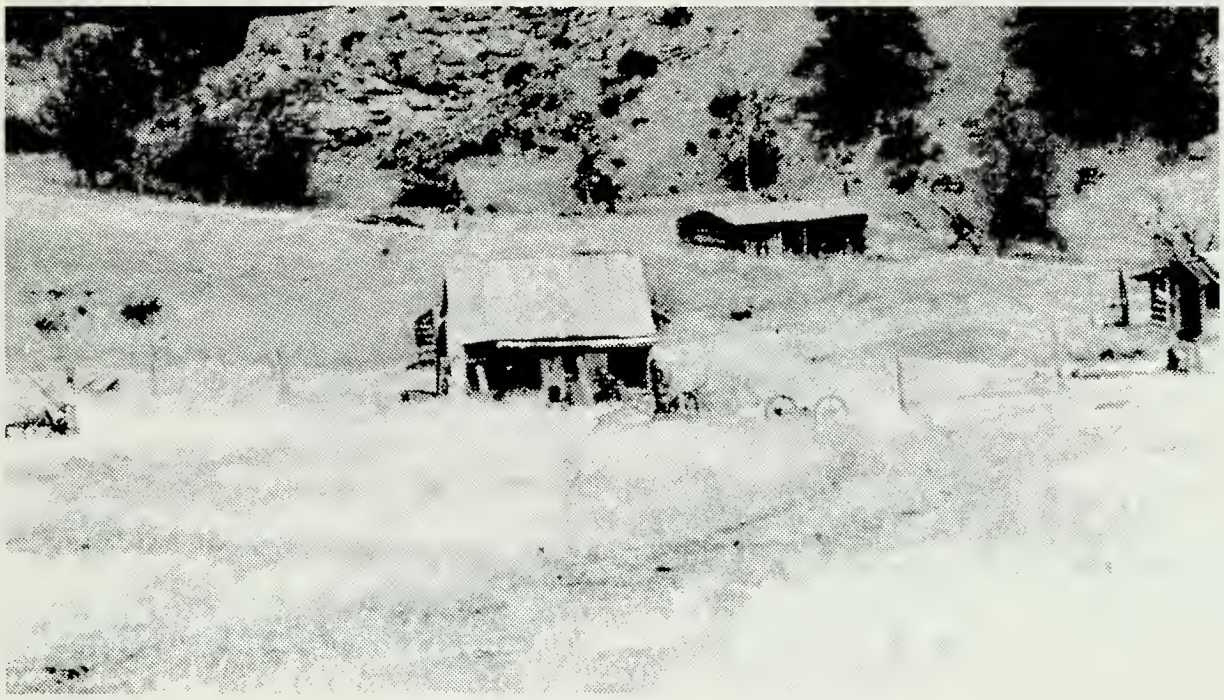
Program Coordinator

Implementation of the program to coordinate the activities of the various landowners, both public and private, is assigned to a program coordinator. The Department of Natural Resources and Conservation is legislatively responsible for administering the Rangeland Resource Program, so the coordinator is responsible to the administrator of the Conservation Districts Division of the Department of Natural Resources and Conservation.

To accomplish the objectives outlined in the program, the coordinator must have considerable knowledge of the science of range management, and a knowledge of practical, everyday working problems. The benefits derived from the program largely depend on the ability of the coordinator to communicate between all parties affected. The program is neither a physical nor a technical undertaking, but rather an attempt to coordinate the efforts of various groups and agencies; the coordinator acts primarily in an advisory and counseling capacity. The strength of the coordinator rests in his abilities to work with people and agencies, to gain cooperation from concerned organizations, and to inform people of the value and importance of proper range management.

Maintaining relationships between the many users of rangelands is of major importance. The demands for uses of the state's rangelands are rapidly multiplying and many times may conflict. The program coordinator is often involved in attempting to resolve these conflicts and bring about satisfactory relations between various users.

As an employee of the Conservation Districts Division, the coordinator works closely with each of the 59 conservation districts and 30 grazing districts in the state, both on their range programs and on various other soil and water conservation activities. Because of numerous other responsibilities required of the position, the coordinator is able to devote less than one-half of his time to the management of the rangeland resource program.



Advisory Body

The Montana Rangeland Resources Act, Section 76-14-106, MCA, calls for an advisory committee to provide advice and counsel to the coordinator and the department for carrying out the rangeland resource program, to review and recommend annual and long-range work programs, to suggest priorities of work, and to review applications for rangeland improvement loans. The executive committee consists of six ranchers appointed by the governor to represent the different geographical areas of the state. In addition, an ad hoc committee of agency and organization personnel serves in an advisory capacity as requested.

Executive Committee

William Hanser, Chairman
Joe Day, Vice Chairman
John Hollenback, rancher representing the southern area of the state
Russ Unruh, rancher representing the northern area of the state
Ray Shaw, rancher representing the eastern area of the state
Richard Lacey, rancher representing the western area of the state

Advisory Committee

Dennis Phillippi, Soil Conservation Service
Clarence Almen, U.S. Forest Service
John Moorhouse, Bureau of Land Management
John Lacey, MSU, Cooperative Extension Service
Roy Henderson, Department of State Lands
Debi Brammer, Montana Association of Conservation Districts
Stuart Doggett, Montana Association of State Grazing Districts

LOCAL LEVEL

Conservation Districts

Advisory responsibility and program guidance are received from the conservation district supervisors. Five supervisors are elected to four-year terms by the voters in each district. Two additional supervisors may be appointed by the governing body of the cities or towns within the district. If there are no incorporated cities or towns in the district, there may be seven elected supervisors. In addition, some districts appoint associate supervisors who act in an advisory capacity to the board, but do not have the authority to make or vote on motions before the board or hold office.

It is the responsibility of the conservation district board of supervisors to appoint the range leader in each district, assist in developing the district range program, and provide guidance and financial assistance to implement the program.

Range Leaders

To accomplish the objectives of the program, the primary need is for coordination. Implementation of the program requires the voluntary services of dedicated individuals. Their qualifications include an understanding of ranch operations and the many additional uses and demands placed on rangelands. These volunteers must have the ability to communicate and to negotiate between ranchers, agencies, and other affected parties. Further, they must have the strong conviction that the improvement and protection of the range resource will benefit the district and the state.

A county range leader has been appointed by conservation district supervisors in all but six of the 59 districts in the state. In those districts that have not appointed a range leader, the board of supervisors acts in that capacity. Some of the duties of range leaders are listed below.

1. **To appoint** a county rangeland resource committee to act in both a working and advisory capacity.

2. **To develop**, in coordination with the conservation district supervisors and the county range committee, a compatible and workable district range program to be carried out on a long-range (10-year) and annual basis.

3. **To prepare** an assessment of the rangeland program in their area showing:

    a. progress made
    b. past projects and present projects being carried out
    c. areas needing attention or improvement
    d. further development goals and objectives for the county and statewide programs

    A checklist to inventory this information is included in the appendix.

4. **To assist** ranchers, sportsmen, recreationists, and other users of rangeland to become more sensitive to the others' needs and become more compatible.

5. **To initiate** a program that will provide voluntary incentives for the improvement of rangelands.

6. **To coordinate** the efforts of ranchers and other interests and agencies in developing and implementing management plans.

7. **To increase** public awareness of rangeland and its importance to the county and state.

8. **To contribute** to and be a part of the state rangeland resource program.

County Range Committee

The range leader selects a county range committee composed of ranchers, businessmen, professional people, and agency personnel to assist him in administering the program at the local level. These committee members serve voluntarily for indefinite terms.

The following is a list of agencies and groups that members of the county range committee are normally selected from, although various counties also include additional members they feel can be an asset to the committee.

Private

- Educators
- Grazing Associations
- Lending Agencies
- Livestock Organizations
- Ranchers
- Real Estate Agents
- Service Clubs
- Wildlife Organizations
- Youth Groups

Local Government

- Conservation Districts
- County Commissioners
- County Planning Boards
- Grazing Districts
- Weed Control Boards

State and Federal Government

State

- Dept. of Agriculture
- Dept. of Fish, Wildlife and Parks
- Dept. of Natural Resources and Conservation
- Dept. of State Lands
- Universities

Federal

- Bureau of Land Management
- Cooperative Extension Service
- Farmers Home Administration
- Fish & Wildlife Service
- Forest Service
- Soil Conservation Service

INDIVIDUAL LEVEL

Any program that affects such a large industry as agriculture, and such a large resource as rangelands, requires the support and general approval of a multitude of people, especially the people that are primarily affected--the farmers and ranchers. To obtain this support and achieve the desired objectives of the program, it is necessary to adhere to the fundamental concept of freedom for an individual to work and live in his own way and to provide a living for his family, as long as he does not encroach upon the freedom of others. With this freedom goes the responsibility to protect the land and other natural resources, so that all people, now and in the future, will have the same privileges to live and work in the free manner we enjoy today.

Those landowners and land managers who have chosen this way of life are then responsible for safeguarding the land and are entitled to technical assistance, advice, and guidance in the management and wise use of the resources.

With this in mind, the Rangeland Resource Program is based on counsel and advice from persons knowledgable in rangeland management. If landowners are properly informed and if management planning is coordinated between private landowners, public land management agencies, and other interested parties, proper management of all rangelands will become a reality with a minimum of additional rules and regulations.

PROGRAM IMPLEMENTATION

SUPPORT DATA

Certain basic data are necessary to make the Rangeland Resource Program effective. These include soils and range surveys, topographic maps, climatic information, land use data, and range condition assessments. Much of this information, concerning the entire state, is presented in the preceding section "Part One: The Resource." More specific local information can be obtained from the local conservation district office and various other agencies.

Rangeland Inventory

More specific information and inventories are basic to the implementation of the program at the local level. Detailed knowledge of the current condition and availability of local resources must precede any determination of needs and priorities for management and treatment.

The suggested inventory consists of assimilating information from various agencies and sources. These inventories essentially start with each ranch. However, inventories may be conducted on a township, drainage, county, or region, depending on the objective. The Montana Rangeland Resource Program is designed to promote inventories on a conservation district or county basis to coincide with district long range plans.

Program Assessment

An assessment of the past and current situation in each county has been or is currently being made by the local range leader and range committee to assess past progress and present activities so that plans can be developed to meet future needs. This is necessarily an ongoing process because the situation is constantly changing and may be affected by external forces such as drought, insect infestations, farm programs, economic conditions, etc.

Other Planning Needs

Variations in rangeland inventories will result from various planning needs required by state and federal agencies. Because these agencies are mandated by law to manage resources in a particular manner, or for a particular objective, planning must take into consideration the constraints under which these agencies operate.

PROGRAM GOALS

This section sets out the original goals of the Rangeland Resource Program, gives a brief discussion of the accomplishments made to achieve each goal, and suggests an alternate method of setting more specific goals that may be adopted by the individual county range committees.

Original Goals

Six goals were originally established for the program in 1970. It was not the intent of those who first proposed these goals to strictly adhere to each, but rather to promote the approach or method that would lead to the accomplishment of each goal.

The following is a list of the ten-year goals established in 1970:

1. Eighty percent of the native range will be operated under some form of intensive management planning.
2. Fifty percent of the native range will be in excellent condition, with 30 percent in good condition.
3. Native range and pasture will be producing 40 percent more usable forage.
4. Eighty percent of the native range will have stockwater fully developed, with stockwater being developed on the remaining 20 percent.
5. Recreational use will increase by 500 percent.
6. The wildlife habitat on native range will be improved to support a more stable wildlife population.

The 1977 edition of this book outlined the situation that led to the establishment of each goal, the approach to be taken to meet them, the progress made between 1970 and 1977, and the benefits to be derived from each.

Achievements

The progress made toward achieving these goals is, in some cases, difficult to measure. A couple of the goals were very much dependent upon the others. The goals were admittedly somewhat idealistic, but significant progress was made in achieving them, even though none were fully realized by 1980.

Goal one, that 80 percent of the native range would be under intensive management planning, was well underway by 1977, with 60 percent under some management plan--a 20 percent increase from 1970. In the last ten years, it is questionable whether an additional 20 percent has been added; precise figures are not available. Such an increase would indicate that the percentage of rangelands under management planning has doubled since 1970.

Goal two, that 50 percent of the native range would be in excellent condition and 30 percent in good condition was not met as expected. The following tables illustrate the progress made.

TABLE 8

Estimated Condition of Nonfederal Rangeland

Year	Excellent	Good	Fair	Poor
1970	10%	38%	42%	10%
1976	12%	47%	34%	7%
1982	13%	46%	34%	7%

Source: U.S. Department of Agriculture, Soil Conservation Service 1984

The condition of rangeland statewide by ownership is shown in table 9.

TABLE 9

Rangeland Condition by Ownership

	Year	Good/Excellent	Fair/Poor
Nonfederal	1982	59%	41%
Bureau of Land Management	1984	71%	29%
U.S. Forest Service	1986	72%	28%

Source: U.S. Department of Interior, Bureau of Land Management, 1986 – U.S. Department of Agriculture, Forest Service, 1986

Substantial improvement in range condition on private and state lands was realized between 1970 and 1976. However, between 1976 and 1982, very little improvement was seen and the original goal was not met. Conversely, the condition of federal rangelands improved dramatically. According to Bureau of Land Management figures, the percentage of good to excellent rangelands increased 20 percent (from 51 percent to 71 percent) from 1964 to 1984, probably due in large part to the implementation of allotment management plans. The Forest Service reports similar improvements. (Note that the Forest Service figures in table 9 represent ecological status rather than range condition. Actual figures are 36 percent Potential Natural Community, 36 percent High Seral, 20 percent Mid Seral, and 8 percent Low Seral.)

Goal three, to increase range and pasture forage production by 40 percent, also fell short of original expectations. Between 1970 and 1976, a substantial (11 percent) improvement had been realized. However, between 1976 and 1986, the increase in forage production did not keep up the same pace as in the earlier years, although some improvement was made.

Goal four, to have stockwater developed on 80 percent of the native range, and the remaining 20 percent in the process of being developed, came very close to being met. In 1970, stockwater had been developed on 60 percent of Montana's rangelands. By 1975, an increase of 10 percent had been realized, and by 1980, additional development brought the estimated total to very near 80 percent, the original goal. Since 1980, range improvements, including stockwater development, have slowed with the decline in the agricultural economy. However, the development of water on the remaining 20 percent of private rangelands is progressing.

Goal five, to increase recreational use of rangelands by 500 percent, is difficult to assess. Increased multiple use management by private landowners and public land managers has definitely led to an increase in recreational use of rangelands. The number of hunting licenses sold, for example, increased 51 percent from 1970 to 1980 and a good proportion of the hunting took place on rangelands. Similar increases in fishing, camping, and other recreational activities have occurred. Consequently, it would be appropriate to say that recreational use of rangelands has increased several-fold since 1970, but perhaps not by the 500 percent originally set as the goal.

Goal six, to improve wildlife habitat on rangeland to encourage and stabilize wildlife populations, has been accomplished to varying degrees. Certainly, improved range condition benefits the wildlife that coexist with livestock on both public and private rangelands. Improved habitat and relatively mild climatic conditions during the past few years have resulted in increased populations of antelope, deer, pheasants, and other wildlife species. These improved habitat conditions have correspondingly encouraged wildlife populations, but because of the natural population dynamics of most species, it is difficult to say whether they have stabilized. Improved land management, and in some cases, management solely for the enhancement of one or more species of wildlife, has become increasingly prevalent in recent years and has undoubtedly proved advantageous to wildlife populations.

New Goals

New program goals have not been established for a number of reasons. Broad-based goals, as were originally set in 1970, are of limited use on a statewide basis. Granted, program goals will provide overall objectives to aim for, but they are often not relevant to those trying to implement the range program at the local level.

For example, the range condition in Big Horn County in 1976 was 75 percent in good and excellent condition and 25 percent in fair and poor condition. According to the timetable established to meet goal two, range condition, this county was two years ahead of schedule. Correspondingly, Big Horn County had likely also achieved goals one, three, four, and six, leaving only goal five to be met, with four years remaining in the time frame. Consequently, little incentive remained to retain an active county program.

While there is no question that improving rangeland is the foremost objective of the program, each county should develop a set of goals that are realistic and meaningful in that particular area. The counties in the eastern part of Montana should necessarily focus on different aspects of range management than those in the west. With the assistance of the conservation district board of supervisors and the district's annual and long-range plans, the county range leader and range committee can formulate a set of specific goals for that county. They should be particular to the geographical area, the problems or items that need attention, and the people who will be most affected.

The most important consideration in setting goals for each county is to concentrate on items that demand attention and to get some activity going. For example, counties in north-central Montana may decide that mechanical treatment to restore productive grasses in clubmoss-blue gramma ranges will be their top priority. Their goals may then be to: 1) increase forage production on these rangelands by 60 percent; 2) improve overall range condition in the county by 30 percent; 3) increase public awareness of the problem and the methods that can be undertaken to solve it; 4) publicize the economic benefits of improvement to the rancher and the community. The range committee may then hold tours, workshops, demonstrations, or seminars, or take other appropriate action to see that the problem is adequately addressed.

Many range committees may need to focus on more than one particular area of concern. A priority list should be formulated by the committee and all goals should coincide with this list. The goals should be set so that they can be accomplished within a reasonable period of time (5 to 10 years). Time tables to achieve the goals should be established so that each year action will be taken that will lead to realizing the final goal.

Priority concerns need not always be problem areas. With the recent advances in management and technology, often a committee may want to concentrate on informing or educating landowners about new grazing systems or methods, new weed control technology, new or better adapted forage species, coordinated management between several landowners, etc.

For the statewide Rangeland Resource Program to function as designed, it is vital that each county implement an active county rangeland resource program. This responsibility rests with the conservation district, the county range leader, and the range committee. If no action results, then neither statewide nor county goals will have significance.

As mentioned earlier, the state program coordinator is available to assist each county and to coordinate activities between counties. It is not the intention of the program that each county create a separate or unique program. Rather, each county should keep in mind the original intent of the program--to improve rangelands and to increase the awareness of their importance to all the citizens of the state--while attempting to implement a county program that will benefit the local residents and the state.

RANGELAND IMPROVEMENT LOAN PROGRAM

The loan program has been an important segment of the Rangeland Resource Program since 1979. It was established to provide low-interest loans to Montana's farmers and ranchers for rangeland development and improvement. Conservation practices eligible for loan funds include stockwater development, cross-fencing, implementation of grazing systems or methods, reseeding, mechanical renovation, sagebrush and weed management, and others.

Initial funding for the program was appropriated by the 1979 Legislature. The program received $300,000 from the Renewable Resource Development fund to finance loans for the next biennium. Twenty-two interest-free loans were provided to private landowners during 1980 and 1981.

The 1981 Legislature approved an additional $350,000 to continue the program. Although the objectives remained the same, some minor changes were made in the program. An annual interest rate of two percent was established, and the original one percent administrative fee was increased to two percent. Twenty-three loans were closed during this biennium.

House Bill 486 passed the 1983 session and was signed by the governor on March 17. This legislation established an earmarked account for the loan program ensuring additional new funding until June 30, 1989 and provided for a revolving account whereby all repayments on outstanding loans will go back into the loan fund to be used for future loans. Over one million dollars will be in the loan account by 1990.

The interest rate for the loans is now set by the department director on July 1 of each year. The Rangeland Resource Executive Committee recommends a rate to the director based on the annual inflation rate, the interest rate charged by conventional lenders, and the economic condition of the agriculture industry. The interest rate is set to ensure sustained funding in the loan account. The interest rate for fiscal year 1987 is 4 percent and reflects current economic conditions.

The original intent of the loan program was to offer low-interest loans that would provide incentive for private landowners to undertake range improvement practices that they might not complete with funds that would cost them considerably more. This intent was fulfilled as the demand for loan funds during the first four years of the program far exceeded the supply. The demand for loans fell sharply during 1984 and 1985, due mainly to the deteriorating financial position of many ranchers. Even with the interest rate at 7 percent, compared to 12 to 14 percent elsewhere, range improvements were not economically feasible for most operations.

With this in mind, the interest rate was reduced effective July 1, 1986, from 7 percent to 4 percent. This reduction, coupled with a brighter economic outlook for a larger number of operators, resulted in a 500 percent increase in applications in 1986 as compared to 1985.

The maximum loan is $20,000. Loans are secured by either a first or a second mortgage on real property. Repayment is scheduled for a maximum of ten years with annual installments. The applicant is required to pay all loan costs, such as title insurance, appraisal fee, and recording fees. All improvements for which loan funds are used must be included as part of a conservation plan that has been developed for the operation.

A loan applicant applies initially to the local conservation district where the application, along with the conservation plan, is reviewed by the board of supervisors. If the application receives favorable review, it is forwarded to the department. The application is then reviewed by the program coordinator and the Rangeland Resource Executive Committee. Those applications approved by the committee are referred back to the coordinator for financial review and to the director for final approval. The program coordinator is responsible for drawing up all agreements and contracts, loan execution, recording all documents, and monitoring loan performance.

A total of 52 loans has been made since the program was initiated, totaling $744,191. The average loan is just over $14,300. Some 301,095 acres have been improved to date. Table 10 shows the improvements that have been undertaken with loan funds.

TABLE 10

Rangeland Loan Improvements

Improvement	Amount
Spring developments	65
Wells	14
Stockwater pipelines	89.2 miles
Fencing	101.6 miles
Stockwater reservoirs	28
Stockwater tanks	165
Reseeding	6,775 acres
Mechanical renovation	2,180 acres
Brush and weed management	3,355 acres
Total acres improved	301,095 acres

Source: Conservation Districts Division, DNRC, 1986

PROJECTS AND PLANS

The Rangeland Resource Program, to be as effective as possible, includes some specific projects and plans that need attention. The following list presents only a small segment of the workloads and their current status. It may be used as an example of the types of activities that may be considered.

The vast majority of the projects and plans listed below are ongoing efforts that are continuously being carried out at both the county and state level. While those items listed here are applicable to both levels, the county range committees have often added others that are more pertinent to their areas. It is essential that the county committees focus their attention on the items of most concern in that particular region. The list below is certainly not all-inclusive and the county range committees are encouraged to expand the list as they feel appropriate.

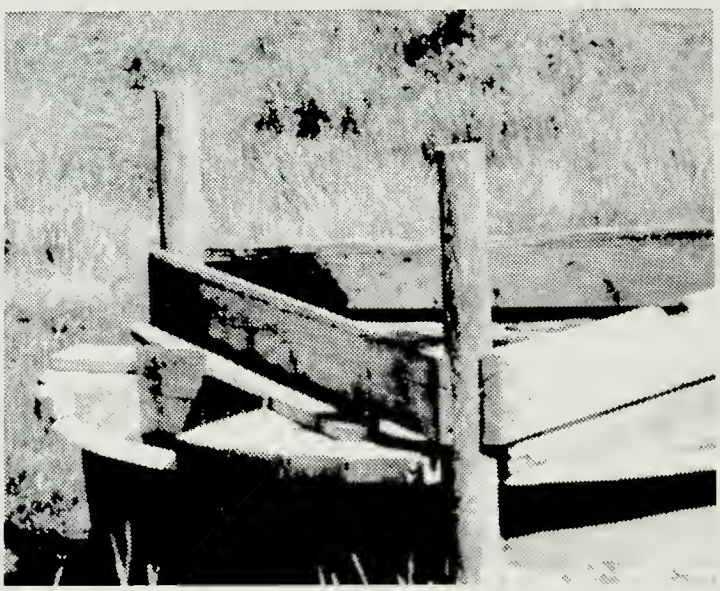
Project or Plan	Status
Provide language to be used by the legal profession when drawing up contracts, leases, etc., that will provide for management protection on the affected lands.	Completed
Assemble county rangeland inventories for use in resource planning and management.	Ongoing
Develop a Rangeland Resource Program brochure.	Completed - last revised in 1986
Develop rangeland drought management plan guidelines.	Ongoing
Develop rangeland water quality management guidelines.	Ongoing
Develop county plan lists for use on tours, camps, 4-H, FFA, etc.	Ongoing
Increase public awareness of the value of rangelands to the local, regional, and state economy.	Ongoing
Assist in the development of a standardized range monitoring system.	Ongoing
Promote and assume the lead in coordinated resource management and planning activities.	Ongoing
Promote and co-sponsor the annual Montana Youth Range Camp.	Ongoing
Promote the Rangeland Improvement Loan Program.	Ongoing

Project or Plan	Status
Assist the Department of State Lands (DSL) and other agencies with the reclamation of mined lands.	Ongoing
Assist cities and counties in urban beautification projects, and the planning and reclamation of industrial areas.	Ongoing
Assist the U.S. Forest Service and the State Forestry Division, DSL, in the planning and implementation of revegetation of logged areas.	Ongoing
Assist the various agencies and corporations in revegetation of land disturbances from exploration for minerals, coal, and oil.	Ongoing
Assist conservation districts in development of their annual and long-range plans to control soil erosion and sedimentation, pursue rangeland improvement, and improve water quality, etc.	Ongoing
Assist and support efforts to increase research on noxious weed management and to implement weed management plans.	Ongoing
Support contract-type cost sharing for rangeland improvement practices and support the concept that all practices are part of an approved conservation plan.	Ongoing
Represent Montana at regional and national rangeland meetings.	Ongoing
Promote educational programs at all scholastic levels concerning the uses and potential of rangelands.	Ongoing
Promote local and statewide range tours, range schools, and range seminars.	Ongoing
Ensure that federal and state agencies consider normal ranch operations in the siting and construction of roads, trails, and access routes.	Ongoing
Assist in the development of positive landowner-sportsman and landowner-recreationist relationships.	Ongoing
Promote the concept of multiple use on all public lands.	Ongoing

CONCLUSION

Our renewable natural resources are our greatest source of wealth and beauty, and rangeland is considered by many to be Montana's largest natural resource. The value of rangeland, once greatly overlooked, is beginning to be more fully recognized. Its condition has been improved with better, scientific management. However, its immense potential for livestock forage, recreation, wildlife habitat, and numerous other uses is far from being fully tapped.

The Rangeland Resource Program, with proper implementation, will aid in the improvement of rangeland, water, and other natural resources. The opportunity is here and the need is great. The challenge can be met through the properly coordinated, sincere efforts of all who will benefit from this important program--each citizen of the State of Montana.



APPENDICES

APPENDIX A

LAWS RELATED TO RANGELAND

FEDERAL

Taylor Grazing Act, 43 U.S.C.A. Sec. 315 et seq. An act to provide the most beneficial use of public range by the creation of grazing districts.

Federal Water Pollution Control Act, 33 U.S.C.A. Sec. 1151 et seq. An act to enhance the quality and value of water resources and to establish a national policy for the prevention, control, and abatement of water pollution.

Forest and Rangeland Renewable Resources Planning Act of 1974, Public Law 93-378, 88 Stat. 476 (16 U.S.C.A. Sec. 1601 et seq.). An act to ensure that Forest Service programs make appropriate contributions to meet the nation's future needs.

Federal Land Policy and Land Management Act of 1976 (commonly known as the BLM Organic Act), Public Law 94-579, 90 Stat. 2744. An act which provides for public land policy and administration for the management, protection, development, and enhancement of public lands.

Soil Conservation and Domestic Allotment Act, 49 Stat. 163 (16 U.S.C.A. Sec. 590a et seq.). An act establishing the Soil Conservation Service and authorizing a national soil and water conservation program carried out through conservation districts. The Great Plains Conservation Program, providing long-term contracts to install planned conservation measures, was authorized pursuant to 16 U.S.C.A. Sec. 590f.

The Watershed Protection and Flood Prevention Act, Public Law 92-419, 86 Stat. 667 (16 U.S.C.A. Sec. 1001 et seq.). An act providing for watershed protection and flood prevention in small watersheds and authorizing river basin investigations.

Fish and Wildlife Act, (16 U.S.C.A. Sec. 742a et seq.). An act to provide authority of policy guidance for conservation, restoration, and propagation of endangered and threatened species of fish, wildlife, and plants. The Soil and Water Resource Conservation Act of 1977, Public Law 95-192. An act providing for a report on the status and condition of the nation's nonfederal soil, water, and related resources, and preparation of a soil and water conservation program based on that appraisal.

Public Rangelands Improvement Act of 1978, Public Law 95-514, 92 Stat. 1803. An act providing for the inventory and identification of public rangeland conditions, the management and improvement of the conditions of public rangelands, the charge of a fee for grazing on public lands, and the protection and management of wild, free-roaming horses and burros.

STATE

The Grass Conservation Act, Title 76, Chapter 16, MCA. An act relating to the renewable resources development program of the state, providing for the creation of state debt by the issuance of bonds, and providing for the making of loans and grants.

The Montana Weed Management Act, Title 7, Chapter 22, Title 80, Chapter 7, MCA. An act to establish a noxious weed management program for the State of Montana.

The Natural Streambed and Land Preservation Act of 1975, Title 75, Chapter 7, MCA. An act to preserve the natural rivers, streams, and land adjacent to them in their natural or existing state.

The Montana Water Use Act, Title 85, Chapter 12, MCA. An act to provide for the administration, control, and regulation of water rights, and to establish a system of centralized records of water rights.

Montana Rangeland Resources Act, Title 76, Chapter 14, MCA. An act to provide for the conservation, protection, development, and utilization of the natural resources of the state of Montana.

APPENDIX B

MONTANA RANGELAND RESOURCES ACT

CHAPTER 14

PART 1--RANGELAND MANAGEMENT

Section
76-14-101. Short title.
76-14-102. Purpose.
76-14-103. Definitions.
76-14-104. Types of land included as rangeland.
76-14-105. Role of state coordinator.
76-14-106. Duties of rangeland resources committee.
76-14-107 through 76-14-110 reserved.
76-14-111. Rangeland improvement loan program.
76-14-112. Rangeland improvement loan special revenue account.
76-14-113. Eligibility for loans.
76-14-114. Criteria for evaluation of loan applications.
76-14-115. Selection of loan recipients.
76-14-116. Rules.

PART 1

RANGELAND MANAGEMENT

76-14-101. Short title. This part shall be known as the "Montana Rangeland Resources Act."

76-14-102. Purpose. The purpose of this part is to establish a program of rangeland management whereby:

(1) the importance of Montana's rangeland with respect to livestock, forage, wildlife habitat, high-quality water production, pollution control, erosion control, recreation, and the natural beauty of the State is recognized;

(2) cooperation and coordination of range management activities between persons and organizations charged with or having the management of rangeland, whether private or public, can be promoted and developed; and

(3) those who are doing exceptional work in range management can receive appropriate recognition.

76-14-103. Definitions. As used in this part, the following definitions apply:

(1) "Committee" means the Montana rangeland resources committee selected as provided in 2-15-3305(2).

(2) "Department" means the Department of Natural Resources and Conservation.

(3) "Grazeable woodlands" means forest land on which the understory includes, as an integral part of the forest plant community, plants that can be grazed without significantly impairing other forest values.

(4) "Montana rangeland resources program" means the rangeland resource program administered by the Conservation Districts Division of the Department of Natural Resources and Conservation in concert with the Montana Conservation Districts law and the Grass Conservation Act to maintain and enhance the rangeland resources of the State.

(5) "Person" means any individual or association, partnership, corporation, or other business entity.

(6) "Range condition" means the current condition of the vegetation on a range site in relation to the natural potential plant community for that site.

(7) "Rangeland" means land on which the native vegetation (climax or natural potential) is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing use.

(8) "Range management" means a distinct discipline founded on ecological principles and dealing with the husbandry of rangelands and range resources.

(9) "State coordinator" means the State coordinator for the Montana Rangeland Resources Act provided for in 2-15-3304.

(10) "Tame pasture" means land that has been modified by mechanical cultivation and whose current vegetation consists of native or introduced species, or both.

(11) "Users of rangeland" means all persons, including but not limited to ranchers, farmers, sportsmen, recreationists, and others appreciative of the functional, productive, aesthetic, and recreational uses of rangelands.

76-14-104. Types of land included as rangeland. The term "rangeland" includes lands revegetated naturally or artificially to provide a forage cover that is managed like native vegetation. Rangelands include natural grasslands, savannahs, shrublands, most deserts, tundra, alpine communities, coastal marshes, and wet meadows.

76-14-105. Role of state coordinator. The State coordinator shall:

(1) serve as an advisor, counselor, and coordinator for and between persons and agencies involved in range management;

(2) strive to create understanding and compatibility between the many users of rangeland, including sportsmen, recreationists, ranchers, and others;

(3) promote and coordinate the adoption and implementation of sound range management plans to minimize conflicts between governmental agencies and private landowners;

(4) participate in zoning and planning studies to insure that native ranges are adequately represented at sessions for development of zoning and planning regulations;

(5) coordinate range management research to help prevent duplication and overlap of effort in this area.

76-14-106. Duties of rangeland resources committee. The committee shall:

(1) review and recommend annual and long-range work programs;

(2) suggest priorities of work;

(3) provide advice and counsel to the coordinator for carrying out the rangeland resource program.

76-14-107 through 76-14-110 reserved.

76-14-111. Rangeland improvement loan program. The Department may make rangeland improvement loans for rangeland development and improvement, including but not limited to stockwater development, cross fencing, establishment of grazing systems, reseeding, mechanical renovation, sagebrush management, and weed control.

76-14-112. Rangeland improvement loan special revenue account. (1) There is created a rangeland improvement loan special revenue account within the state special revenue fund established in 17-2-102.

(2) There must be allocated to the rangeland improvement loan earmarked account 15 percent of the total amount of renewable resource development grants and loans as provided by 90-2-113, any principal and accrued interest received in repayment of a loan made under the rangeland improvement loan program, and any fees or charges collected by the Department pursuant to 76-14-116 for the servicing loans, including arrangements for obtaining security interests.

76-14-113. Eligibility for loans. (1) Any person may apply for a loan to finance rangeland improvements to be constructed, developed, and operated in Montana who:

(a) is a resident of Montana;

(b) is engaged in farming or ranching; and

(c) possesses the necessary expertise to make a rangeland loan practical.

(2) All loans must be for rangeland improvement or development exclusively.

(3) An application for a loan must be in the form prescribed by the Department and accompanied by a resource conservation plan, which may be prepared in consultation with the United States Soil Conservation Service.

76-14-114. Criteria for evaluation of loan applications. The following criteria must be considered in seeking loan recipients:

(1) Loan applications must be ranked according to the following priorities:

(a) Range improvement or development projects undertaken on native rangeland, resulting in the improvement of native range condition and of benefit to more than a single operator, have first priority.

(b) Range improvement or development projects undertaken on native rangeland, resulting in the improvement of native range condition but of benefit to only a single operator, have second priority.

(c) Range improvement or development projects undertaken on either native rangeland or tame pastureland used in conjunction with native rangeland, or both, resulting in the improvement of native range condition and the condition of the tame pastureland used in conjunction with native rangeland, have third priority.

(d) Range improvement or development projects undertaken on tame pastureland, resulting in the improvement of the tame pastureland exclusively, have fourth priority.

(e) Range improvement or development projects undertaken to return to rangeland status land that was once native rangeland and that has since been cultivated have fifth priority.

(2) Consideration must be given to the number of related resources that will benefit, including but not limited to water quality, wildlife habitat, and soil conservation.

(3) Consideration must be given to the amount of funding from other sources.

(4) Consideration must be given to the feasibility and practicality of the project.

76-14-115. Selection of loan recipients. (1) Conservation district supervisors shall initially review loan applications for feasibility and prioritize applications for referral to the Department.

(2) The Department shall organize and review applications for clarity and completeness prior to committee review.

(3) The committee shall consider applications and make recommendations to the Department.

(4) The Department shall finally approve or disapprove applications recommended by the committee and shall select loan recipients.

76-14-116. Rules. The Department shall adopt rules:

(1) prescribing the form and content of applications for loans and the required conservation plan;

(2) governing the application of the criteria for awarding loans and the procedure for the review of applications by conservation district supervisors, the committee, and the Department;

(3) providing for the servicing of loans, including arrangements for obtaining security interests and the establishment of reasonable fees or charges;

(4) providing for the confidentiality of financial statements submitted; and

(5) prescribing the conditions for making loans.

APPENDIX C

PERSONS AND GROUPS WITH RANGELAND MANAGEMENT RESPONSIBILITIES

Following is a list of individuals, groups, and organizations that have direct or indirect responsibilities in the management of our grazing lands. Each category is then briefly described.

1. Private Landholders

    a. Individual ranch owners/operators
    b. Absentee owners
    c. Renters and sharecroppers
    d. Corporations
    e. Grazing associations
    f. Project areas (conservation district-sponsored)
    g. Indian reservations
    h. Public utilities

2. State of Montana

    a. Department of State Lands
    b. Department of Fish and Game
    c. Department of Natural Resources and Conservation
    d. State cooperative grazing districts
    e. Conservation districts
    f. State experiment stations
    g. Department of Health and Environmental Sciences
    h. Department of Agriculture
    i. Department of Livestock
    j. Department of Community Affairs
    k. State Legislature

3. Federal Land Management Agencies

    a. Forest Service
    b. Bureau of Land Management
    c. Bureau of Indian Affairs
    d. National Park Service
    e. Bureau of Reclamation
    f. Fish and Wildlife Service
    g. Agricultural Research Service
    h. Army Corps of Engineers

4. Other Federal Agencies

    a. Environmental Protection Agency
    b. Office of Management and Budget

5. Educational and Technical Assistance

    a. Soil Conservation Service, U.S. Department of Agriculture
    b. Cooperative Extension Service
    c. Department of Animal and Range Science, Montana State University

6. Financial

   a. Individual landowners/operator
   b. Banks
   c. Production Credit Association
   d. Farmers Home Administration
   e. Insurance company loans
   f. Federal Land Bank
   g. Great Plains Conservation Program (Soil Conservation Service)
   h. Agricultural Conservation Program (Agricultural Stabilization and Conservation Service)
   i. Small Business Administration
   j. Renewable Resource Loan Program (Department of Natural Resources and Conservation)
   k. Water Development Program (Department of Natural Resources and Conservation)
   l. Rangeland Improvement Loan Program (Department of Natural Resources and Conservation)

7. Private Organizations

   a. Society for Range Management
   b. Montana Association for Conservation Districts
   c. Rural Area Development Committee
   d. Agricultural Lenders' Range School
   e. Montana Wildlife Federation
   f. Sportmens Organization
   g. The Montana Stockgrowers Association
   h. The Montana Woolgrowers Association
   i. The Montana Association of State Grazing Districts
   j. Others

PRIVATE LANDHOLDER

Private landholders comprise the largest single category having responsibilities in rangeland management. They own 70 percent of the land area of Montana, which produces most of the forage for domestic livestock plus a large share of the forage for wildlife.

Private landholders are grouped into several subcategories based on their particular professions and locations. Those in the operator/owner subcategory work on, live on, and manage their land directly. This usually results in good range condition, because the land can be improved most easily in the shortest period of time by these individuals.

In the absentee owners category are those who hold title to the land and are legally responsible for its condition. However, they operate their holdings by the use of many types of agreements with renters. Generally, absentee owners are proud of their lands, but many times distance tends to obscure their vision in seeing problems as they occur.

In the renter and sharecropper subcategory are those whose primary concern is the cash crops from the land. This tends to direct their interest in the land away from development and protection toward production, because their occupancy is temporary. This condition does not generally create the interest in excellent range conditions that is necessary for the highest quality management.

Corporate holdings in Montana are an important subcategory. These large corporations, in the past, often acquired their land for reasons other than forage production. Usually the acquisition was for possible mining, timber investment, or industrial uses. To these owners, the cash return from grazing is minor in comparison to the basic incomes of the organizations. On the other hand, corporations have been well informed regarding the importance of range conditions and management and have completed some of the most outstanding examples of range development that have been accomplished to date.

Railroad lands are a particular category of corporate landholdings in Montana. Basically these lands were given to the railroads to enhance their development and to assist in financing the original construction of the rail lines. The railroad companies are endeavoring through trained range specialists to get proper management on these tracts, but the landlord-tenant arrangement gives them an absentee status that makes it difficult to gain rapid results.

State grazing associations are relatively new landholders. They are groups of ranchers who have formed an organization to purchase large areas of grazing lands. These associations have incorporated into their by-laws the provision that good range management is to be practiced at all times. This type of an arrangement is an example of recognition of the importance of good management, and the results of their efforts are apparent on nearly every unit.

Project areas of conservation districts can be established to carry out specific resource management and improvement proposals. Range renewal projects could be implemented through a project area approach.

Indian reservations own very large areas of the rangeland in Montana and have a major responsibility for improving management on the grasslands. Tribal councils and other organizations are working hard to get range improvement through proper management started and accepted on these lands. There is a good potential for increased production as these plans progress and educational programs are initiated.

STATE OF MONTANA

Several departments and bureaus of state government have responsibilities for grazing lands. The following have been selected for discussion because they have lands under direct management.

The largest state land manager is the Department of State Lands, which is responsible for the school trust lands and other smaller areas. The grazing lands are generally rented out under long-term leases to individual operators. Because the renters apply all degrees of management, range condition varies from poor to excellent. The State Lands Department is moving rapidly into management planning with some development. In the future, good results can be expected on those tracts, given concentrated attention.

Responsibilities of the Forestry Division of the Department of State Lands include both timber and grazing management, for the lands administered are generally in the form of grazeable timber lands. Grazing management is usually secondary to timber management; however, grazing management is being applied to these areas, and good results are evident. With improvement of condition on the rangelands over the entire state, the Forestry Division's responsibility for fire protection also becomes critical.

The Department of Fish, Wildlife and Parks has been steadily acquiring tracts of land that are important to both recreation and game management. These tracts are usually well managed and can be expected to improve in condition in the future. Population pressure on some of the areas which are used to gain access to streams and picnic sites will make it difficult to maintain a good condition range. Only special care can accomplish this task. In recent years, the Department of Fish, Wildlife and Parks has implemented grazing plans that utilize cattle to manage vegetation on a number of game ranges.

The Department of Natural Resources and Conservation also has lands under direct management. Generally small tracts of land surrounding state-owned water projects are administered by the Water Resources Division.

A discussion of the role of the Conservation Districts Division of the Department of Natural Resources and Conservation is presented on page 20.

State cooperative grazing districts are real pioneers in the management of grasslands and have made good progress over the years. Their position is one of extreme importance in the improvement of Montana's rangelands.

Conservation districts have a two-fold responsibility. The first is a direct responsibility to properly manage any grasslands that may be owned by the districts. Whenever a district acquires land, proper management is applied, not only for the benefit derived, but so the area can be used for demonstration and educational purposes. The second responsibility is to properly manage, protect, and utilize the soil, water, and vegetative resources of the state.

The state experiment stations have areas of rangelands that are used to carry out research projects. As research is conducted, some lands may deteriorate in condition. This is necessary to gain knowledge which will benefit the total range management program. Generally the lands of the experiment stations are well managed and in an improving condition.

Some university lands are classified as rangeland. These are usually well managed and planned and are in either good or improving condition.

Institutional lands of the state are now mostly well planned and in an improving condition. A good example is the prison ranch, where excellent planning has been developed; the vast acreage of rangeland is in good to excellent condition.

It is a responsibility of the state agencies to plan proper range use and practice above-average management on their lands.

FEDERAL LAND MANAGEMENT AGENCIES

Several federal agencies control approximately 30 percent of the land area in Montana. Thus, these agencies have a large responsibility to the rangelands that they administer and an equal obligation to the grazing lands that are affected by the various agencies' decisions and plans.

The Forest Service administers the largest area of federal lands in the state. As of August 1986, 16,733,232 acres were administered by the Forest Service. Much of the national forest land is suitable for grazing. It supplies summer forage for many ranchers, plus habitat and forage for wildlife. These lands primarily supply water production and recreation. The vegetative condition is generally good, and planning can be coordinated between private landowners and the Forest Service. The Resources Planning Act of 1974 calls for long range planning adequate to insure that Forest Service programs make appropriate contributions to meet the nation's future needs.

The Bureau of Land Management (BLM) is the agency designated to manage national resource lands under the Federal Land Policy and Land Management Act of 1976. As of January 1977, there were 8,011,595 acres of BLM lands in Montana. The scattered and fragmented land pattern makes management difficult. In most cases the management plans developed are directly affected by intermingled private lands. These lands are also often quite fragile and easily damaged by grazing and other disturbances, thus adding to the difficulties of land management.

The Bureau of Indian Affairs (BIA) owns and manages approximately 125,000 acres. Its primary responsibility is one of advice and guidance to the reservations. The BIA has an indirect responsibility for 5,284,806 acres of tribal-owned trust and allotted rangelands on the different reservations.

The National Park Service has 185,435 acres of grazing land in Montana. These lands are intensively managed, but, due to the pressure of recreationists and their demands, it is difficult to keep these ranges in an improved condition. Game management and travel pattern controls are high priority items in national parks.

The Bureau of Reclamation has about 162,000 acres of rangeland included in its total Montana acreage of 256,270. The bureau is responsible for seeing that these rangelands are properly cared for and that good management planning is applied.

The Fish and Wildlife Service administers 1,077,709 acres of grazing land. These lands are managed and planned for improvement of the vegetation cover, watershed protection, and food and habitat for wildlife. In many instances the lands also provide summer forage for ranchers' livestock. The rangeland administered by this bureau does have some recreation pressure, which makes management somewhat more difficult.

The Agricultural Research Service (ARS) is responsible for managing its own rangelands in the best and most scientific manner. This is being done, and its lands are in an improving condition. In addition, the ARS is responsible for carrying on research to help solve some of the many vexing problems confronting rangeland managers and owner/operators.

The Army Corps of Engineers is not primarily a grazing land manager. However, it controls more than one-half million acres in Montana, of which 47,164 are rangeland. Planning and management of these areas are receiving adequate attention at the present time.

OTHER FEDERAL AGENCIES

ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) is an independent regulatory agency created by Executive Order in 1970 to protect and enhance the environment through research, enforcement, and assistance to state and local governments. Its activities include control of air and water pollution, solid wastes, pesticides, radiation, and noise; the EPA's water quality responsibilities are particularly relevant, since a large portion of Montana's water resources originates from rangelands.

OFFICE OF MANAGEMENT AND BUDGET

The Office of Management and Budget (OMB) is an agency of the federal government that is primarily responsible for establishing the budgets of all other federal agencies. OMB is directly controlled by the administration and presents budget recommendations to the administration and Congress. The budget recommendations made by OMB for federal agencies such as the Forest Service or Bureau of Land Management could ultimately affect the rangeland management activities of these agencies.

OTHER FEDERAL ENTITIES

CONGRESS

The Congress can materially affect budget appropriations to federal agencies, affecting their ability to implement management and improvement programs on public rangelands. Further, legislation enacted or rejected by Congress can also materially affect the agencies and the priority assigned to each of the various activities the agencies may be involved in.

EDUCATIONAL AND TECHNICAL ASSISTANCE

Technical assistance, particularly to the private landowner and/or operator, is vital to the management and improvement of Montana's rangeland resources. This assistance is also needed by the management agencies so that they may gain maximum results from their programs. With continued and increased efforts to improve the rangelands, technical assistance will also need to be continuously expanded.

The Soil Conservation Service (SCS) assists ranchers in developing and carrying out management plans that are based on the conservation needs of the individual ranch operations. Their services are available upon request as staffing and workload will permit. The SCS, through conservation districts, has placed strong emphasis on vegetative practices. Its range management staff has been reinforced, and research is being accomplished at the Plant Materials Center in Bridger, Montana. At this center, various species of native plants are studied and developed to make better plants available for rangelands and for other conservation purposes.

The Cooperative Extension Service (CES) supplies technical assistance through a state, federal, and county cooperative program. The CES, through county agents and state specialists, plays a vital role in rangeland management programs. Its major service is education. Promoting range management to ranch operators, children in 4-H programs, and urban dwellers is an important part of the education process.

The State Extension Range Specialist, CES, has a large responsibility in getting ranchers to apply the latest management techniques and methods developed by research. In the future this part of the Extension Service program will be equally important. A program of particular importance presently being conducted by the Extension Service is the Grazing Lands Education Project.

The 4-H range judging contests and projects are moving along very well, and are assisting in increasing the application of range management principles on the land.

The Montana State University Department of Animal and Range Science has produced invaluable research in grassland management, in addition to conducting its classes for range management graduates. The department today is the nucleus of what will be needed in the future. Its present quality is to be praised, but its number may soon be far short of meeting the need for personnel trained in research and land management, and for skilled owner/operators, that will be required to meet the demands of our range management programs.

FINANCIAL

The largest single financial contributor to proper range management is the landowner. This group of range managers will need to consistently invest in necessary projects such as grazing systems, spraying, seeding, fencing, and water development on their individual units. These activities are not extremely expensive, and they can be incorporated into yearly budgets as regular cost items.

Stable livestock prices that will return a fair net profit will permit these necessary capital investments, which will in turn be reflected in improved condition of the rangeland and increased

stability of the operation. However, ranchers must be cautioned not to establish high carrying capacities during favorable years, but rather to allow rangelands to improve in condition so that, in periods of drought or low prices, the rangeland can support some overuse for short periods, if necessary.

Major projects need special means of financing to spread the cost over several years. The generally accepted banking methods, such as commercial and private banks, the Production Credit Association, and the Farmers Home Administration, have a direct responsibility to supply credit landowners in the medium range of financing over a short period of years. When the pressure from expanded rangeland development and improvement becomes greater, these financial institutions will need to give this type of loan a high priority.

Long term loans for the complete revamping of a range project may be handled by insurance loans and land banks. This type of loan should be available to the owner/operator as another tool to gain good management.

The U.S. Department of Agriculture's Great Plains Conservation Program supplies long term assistance, while its Agricultural Conservation Program provides cost-sharing on short term management practices. Additional money is needed in these programs to meet the demands for range and other types of development.

One of the more recent sources of agricultural financing is the Renewable Resources Development Program. Passed by the Montana Legislature, the act makes use of the coal severance tax in the form of low-interest loans to finance the development of any renewable resource, which includes rangeland and other agricultural projects.

The Water Development program is also available from the Department of Natural Resources and Conservation to finance agriculture development of the state's water. Long term low-interest loans are available to producers for water development projects, including stockwater development projects.

The Rangeland Improvement Loan Program, as explained in Chapter II, is available to private landowners for rangeland development and improvement. The program was established for the sole purpose of funding low-interest loans for the improvement of rangelands. This program is also offered by the Department of Natural Resources and Conservation.

PRIVATE ORGANIZATIONS

Several private organizations are interested in rangelands, either directly or indirectly.

The most widely recognized organization that is devoted strictly to rangelands is the Society for Range Management, a private, nonprofit, professional association dedicated to advancing a comprehensive understanding of range ecosystems and the intelligent use of all range resources. This worldwide group's membership is made up of range scientists, researchers, educators, land managers, and ranchers. Their goal is to advance the science and art of grazing land management. The organization assists all who work with rangelands to keep abreast of new findings and applications in range management and strives to create a public appreciation of the benefits to be derived from proper range use.

There are two sections of the Society for Range Management in Montana--the International Mountain Section in western Montana, and the Northern Great Plains Section in the eastern part of the state. The society can supply a great deal of advice and counsel in such matters as broad area planning and education programs.

The Montana Association of Conservation Districts is a statewide organization comprised of 59 districts that work in all resource areas; rangelands are a top priority. Through their corporation,

this group owns the Plant Materials Center in Bridger, Montana. This association sponsors the range programs and conducts various education projects through their range, forestry, and public lands committee.

The Rural Area Development Committee (RAD) is a volunteer group of persons assisted by the Extension Service to promote rural development. As early as 1963, the Rural Area Development Committee recognized the many opportunities that existed for range improvement in Montana. Consequently, the Rural Area Development Committee established a Range Subcommittee and charged it to endeavor to accomplish the following purposes.

1. Increase awareness of range development potential and its beneficial effects on community and individual income;

2. Assist in obtaining and promoting the coordination of activities of private, state, and federal organizations in range resource development;

3. Encourage the development of educational programs showing the effect of grazing use, recreational use, and watershed use of private, state, and federal lands on community income, stabilization, and welfare;

4. Assist in determining the need for research in range resource development, and create an awareness of research needs;

5. Assist local development groups in giving adequate attention to range resource development when preparing overall economic development plans and developing specific projects.

The Montana Wildlife Federation is a statewide sportsmen's and conservationist's group that is dedicated to conservation and an improved habitat for wildlife. The federation promotes good range management. The efforts of urban groups who work to improve the general condition of the rangelands will be valuable to the rancher and sportsman alike.

Sportmen's clubs are sometimes the local extension of the Wildlife Federation, with similar interests and objectives. The membership of these groups often includes many ranchers and farmers. Although hunting and fishing are their prime concerns, the general improvement of the natural resources is also of high priority in their work.

The Montana Stockgrowers Association is one of the oldest organizations in the state. Raising livestock, use of public lands, and government controls are its high priority programs. This organization is one of Montana's moving forces and has had much to do with many vegetative programs that have been put into action. Because they are ranchers, the members are always vitally concerned with livestock forage. The membership today is taking a serious look at the many different uses of grazing lands, such as recreation and wildlife habitat. There will be more participation by the stockgrowers in range management efforts in the future.

The Montana Woolgrowers Association has a history of progressive action on all matters of concern to that industry and the general public. While the sheep industry has decreased considerably in recent years, the association is still influential, and the quality of its work is high. The programs of range management sponsored by the woolgrowers are very effective.

The Montana Association of State Grazing Districts is a private association of thirty state cooperative grazing districts, all of which are in the eastern half of the state. Their purpose is to provide for the conservation, protection and proper use of the range resources in the state. The districts are organized under state law. Montana was the first state where grazing districts were formed and is the last state where they remain functional.

APPENDIX D

MONTANA RANGE LEADERS

Conservation District	Name	Conservation District	Name
Area I			
Daniels County	Daniels County CD	Fergus County	Mel Jackson
Garfield County	Charles Pluhar	Judith Basin	Lee Hansen
Petroleum County	Monte Mlekush	Phillips	Lee Jacobs
Froid and Culbertson-Bainville	Gary Sethre	Sheridan County	Kent Nathe
Valley County	Ron Stoneberg		
Area II			
Carter County	Rus Guyer	Dawson County	Willie Milliron
Little Beaver	Ralph Rising	McCone	Margaret Rees
Custer County	Bill Griffin	Powder River	Darrel Hanson
Prairie County	Lonnie Reukauf	Richland County	Charles Lowman
Wibaux	Leon Thrams		
Area III			
Big Sandy	Bill Handl	Blaine County	Matt McCann
Cascade County	Terry Rearden	Chouteau County	Rick Anderson
Glacier County	Marvin Kimmett	Hill County	Walt Dion
Liberty County	Larry Hendrickson	Pondera County	Clay McAlpine
Teton County	Charles Proff	Toole County	Gary Enneberg

Conservation District	Name	Conservation District	Name
	Area IV		
Big Horn	Big Horn CD	Carbon County	Gordon Boyer
Lower Musselshell	Gale Stensvad	Rosebud County	Beecher Warner
Stillwater	Robert Story, Jr.	Sweet Grass	Terry Terland
Treasure	Phil Fox	Upper Musselshell	Robert Lee
Yellowstone	Yellowstone CD		
	Area V		
Bitterroot	Stephen Vogt	Deer Lodge Valley	John Hollenback
Eastern Sanders	Ed Magera, Jr.	Flathead County	Flathead CD
Granite	Jim Bloom	Green Mountain	Green Mnt. CD
Lake County	Delbert Hawkins	Lincoln	Lincoln CD
Missoula & Mineral	Sidney Wills	North Powell	Dave Cochran
	Area VI		
Beaverhead	Maynard Smith	Broadwater	Rita Beard
Gallatin	Robert Lane	Jefferson Valley	Mick Jackson
Lewis & Clark	Rick Grady	Madison	Lynn Owens
Meagher County	Burt Hurwitz	Mile High	Paul Gneiting
Park	Bruce Malcolm	Ruby Valley	Gary Giem

APPENDIX E

CHECKLIST FOR RANGE LEADERS

County ACREAGE Private _____ State _____ USFS _____ BLM _____ Other _____	INVENTORY		PLANNED OBJECTIVES		EVALUATION	
	Units Completed at Beginning of Year	Units Remaining to be Completed	Current Year (19__)	Long Term (to 19__)	Planned Objectives Completed at End of Year	Total Cost
EDUCATION (number)						
Range Tours						
Workshops						
Planning Seminars						
Community Meetings						
Youth Camps						
News Media						
EROSION AND SEDIMENT CONTROL (acres)						
FENCING, CROSS (feet)						
FIRE CONTROL (acres)						
HIGHWAY AND ACCESS ROADS (miles)						
INSECT CONTROL (acres)						
MINING (acres)						
PROPER RANGE USE (acres)						
Reseeding						
Controlled Grazing						
RANCH UNITS - RANGE PLANS (number)						
RANGELAND CONVERTED (acres)						
Cropland						
Subdivision						
RECREATION						
Camping Areas (number)						
Hiking and Motorbike Trails (miles)						
Self-guided Tour Routes (miles)						
RODENT CONTROL (acres)						
SHELTERBELTS (feet)						
STOCKWATER DEVELOPMENT						
Wells (number)						
Troughs-Tanks (number)						
Pipelines (feet)						
Reservoirs (number)						
Springs (number)						
STREAMBANK PRESERVATION (miles)						
WEED CONTROL (acres)						
WILDLIFE IMPROVEMENT						
Fish Pond Stocking (number)						
Habitat Development (acres)						
OTHER						

SUGGESTIONS FOR ADMINISTERING THE MONTANA RANGELAND RESOURCES ACT

This form, when completed, will provide an inventory of the current situation, short- and long-term objectives, that year's accomplishments, and the expenses involved in improvements for each district--information which is needed by range leaders, DNRC personnel, and cooperating agencies. Because the compiled district programs largely make up the state program, these inventories will also be valuable to the Advisory Council in making recommendations for administration of the Montana Rangeland Resource Program. To be most useful and effective, the inventories will have to be revised and updated frequently.

It may be desirable to have one of these forms filled out for each U.S. Geological Survey sub-drainage basin in concert with a soil conservation sediment control program. The same may be true concerning public lands.

Most items listed should be self-explanatory, but DNRC field representatives have the necessary definitions and interpretation of each. DNRC personnel will work with range leaders and cooperating agencies in securing and compiling information for this form. Several agencies already have some of this type of information available.

Not all items listed are applicable to each district. Space has been provided to include other items that a district may want to add. A red star should be put by the item(s) the range leader wants given the highest priority during that year.

NOTES:

APPENDIX F

SUGGESTED LANGUAGE FOR INCLUSION IN LEASES AND CONTRACTS

SHORT-TERM LEASE

The parties hereto mutually agree that the initial stocking rate of the lease premises is _____ animal-unit months. For purposes of this agreement an animal unit (AU) is considered to be the equivalent of one mature cow with calf. An animal-unit month (AUM) is the amount of feed or forage required by one animal unit for one month. Lessee shall, during the term of this lease, keep accurate records of the animal-unit months of grazing on each area within the premises. Prior to December 31 of each year, the parties will make a grazing use analysis and review of management encompassing the entire premises with a qualified range consultant selected by mutual agreement of the parties. The stocking rate and a grazing plan for the subsequent year shall be based upon the use analysis and management review and implemented by the lessee.

LONG-TERM LEASE

The parties hereto mutually agree that the initial stocking rate of the leased premises is _____ animal-unit months. For purposes of this agreement an animal unit (AU) is considered to be the equivalent of one mature cow with calf. An animal-unit month (AUM) is the amount of feed or forage required by one animal unit for one month. The parties hereto shall, through mutual agreement, devise a management program designed and intended to maintain or improve the vegetative condition and soil resources of the said property during the term of this agreement. Lessee shall, during the term of this agreement, keep accurate records of the animal-unit months of grazing on each area within the premises. Prior to December 31 of each year, the parties will make a grazing use analysis and review of management encompassing the entire premises with a qualified range consultant selected by mutual agreement of the parties. The stocking rate and a grazing plan for the subsequent year shall be based upon the use analysis and management review and implemented by the lessee.

CONTRACT FOR DEED

The parties hereto mutually agree that the initial stocking rate of the leased premises is _____ animal-unit months. For purposes of this agreement an animal unit (AU) is considered to be the equivalent of one mature cow with calf. An animal-unit month (AUM) is the amount of feed or forage required by one animal unit for one month. The parties hereto shall, through mutual agreement, devise a management program designed and intended to maintain or improve the vegetative condition and soil resources of the said property during the term of this agreement. Buyer shall, during the term of this agreement, keep accurate records of the animal-unit months of grazing on each area within the premises. Prior to December 31 of each year, the parties will make a grazing use analysis and review of management encompassing the entire premises with a qualified range consultant selected by mutual agreement of the parties. The stocking rate and a grazing plan for the subsequent year shall be based upon the use analysis and management review and implemented by the buyer.

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